descon®

PRODUCT**WORLD**

NEXT WATER GENERATION.®

descon

NEXT WATER GENERATION. ®

descon

PRODUCT**WORLD**

THE **COMPANY**

ABOUT **US**

Founded in 2010 from water-treatment-professionals with long practical experiences, completely established in the water-treatment-market of today.

The **descon®** product-portfolio includes all key-components for a professional water-treatment of public- and private swimming pools.

The majority of the products, e. g. measuring and dosing-systems, dosing-pumps, ozone, UV and special- chemicals are specific **descon®** -developments.

Made in Germany

Approved technologies, innovations and new developments are the technical basics of our portfolio.

Product-development and production effected under highest quality-standards in Germany.

Highest quality, competent services and sales as well as liability are the foundations of our company-philosophy.

NEXT WATER GENERATION. ®

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NEW, PRECISE, INNOVATIVE.

Welcome to the new product-world of descon®

The new generation descon-trol XV will be launched in the season 2015
Measuring-, controlling- and dosing-systems state of the art, innovative, easy operation, related to practise experience of many years

Also available on request with descon mobil-trol one – the mobile pool-control of descon®-

NEXT WATER GENERATION. ®
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descon® trol XVS LINE

descon® measuring-, controlling- and dosing-system descon-trol XVS with touchpad for easy and intuitive operation with integrated peristaltic dosing-pumps descon dos synchron plus for a reliable and precise dosing. Apart from the standard parameters free chlorine, redox, pH and temperature now also equipped with a controller for the filtration-system. Possibility of an individual selection of water-parameters. One system for all kind of applicatons for a perfect water-quality.

NEXT WATER GENERATION. ®
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MEASURING, CONTROL AND DOSING TECHNOLOGY (MCDT) FOR A BRILLIANT WATER QUALITY.

NEXT WATER GENERATION. ®
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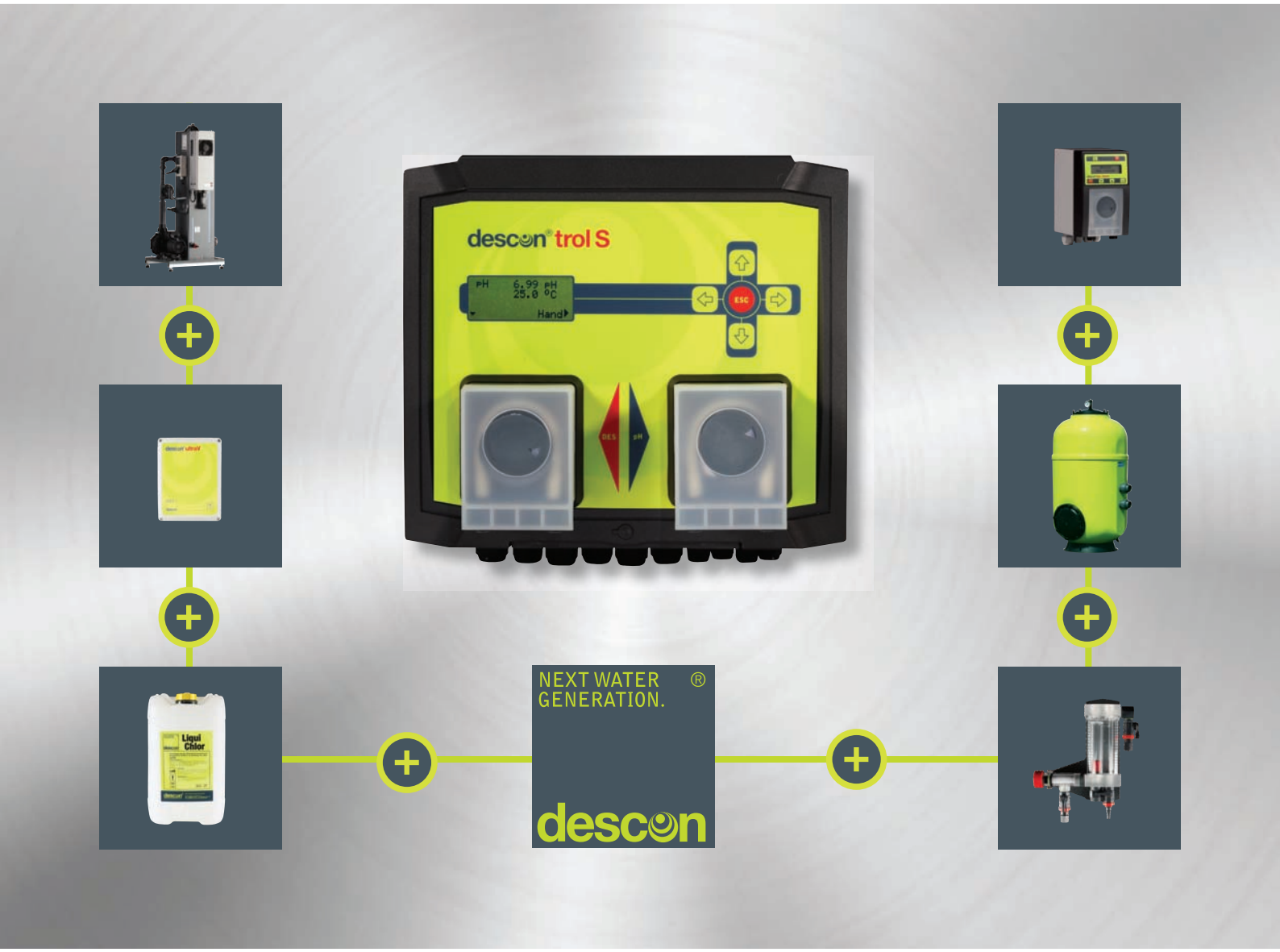
descon® trol S

descon® measuring and control device with integrated peristaltic metering pumps descon dos E, for pH and disinfectant, incl. temperature display. Modern wall mounting case IP 54, with LCD display 60 x 25mm, 4-line, backlit.
Intuitive, simple operation via membrane keyboard, plain text display. Language selection (German, English, French, Italian, Dutch and Russian). ASR automatic probe cleaning for chlorine sensor (potentiostatic measuring method),
real time clock, sample water monitoring, automatic switch-on delay, container level control with status displays in plain text.
Peristaltic metering pumps with wear-free stepper motor and leakage sensor. metering capacity up to 5 l/h.

System components:



descon®trol S
Version CHLORINE-FREE / pH / t
Complete system, consisting of:

descon®trol S measuring and control device CHLORINE-FREE / pH / t - OxiActiv active oxygen time-controlled - with 2 descon® dos E stepper motor metering pumps, with wear-free stepper motor, max. metering capacity approx. 5 l/h.
Compact measuring cell 0310/R incl. sample water monitoring, sampling, sampling tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Sensor set for pH / t
Measuring cable set for pH / t
Wall bracket for test liquids / cleaning agents.
Calibration solution, probe cleaner, sample water kit.
Metering valves, suction lances with reed contact,
Metering hoses, user manual and quick start guide.

Item no.: 11210

Factory assembly on
plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11903

descon®trol S
Version redox / pH / t
Complete system, consisting of:

Measuring and control device **descon®trol S** Rx/pH/t
- **Chlorine dosing via redox** -
with 2 descon® dos E stepper motor metering pumps, with wear-free stepper motor,
metering capacity max. about 5 l/h.
Compact measuring cell 0310/R incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Sensor set for Rx / pH / t.
Measuring cable set for Rx / pH / t.
Wall bracket for test liquids / cleaning agents
Calibration solution, probe cleaner, sample water kit.
Metering valves, suction lances with reed contact, metering hoses and operating instructions and quick start guide.

Item no.: 11110

Factory assembly on
plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11900

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descon®trol S
Version free chlorine / pH / t
Complete system, consisting of:

Measuring and control device **descon®trol S**
free chlorine/pH/t
- **Chlorine dosing using the potentiostatic measuring method** - with 2 descon dos E stepper motor metering pumps, with wear-free stepper motor, metering capacity max. about 5 l/h.
Compact measuring cell 0410/B, incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Sensor set for free chlorine / pH / t.
Measuring cable set for free chlorine / pH / t .
Wall bracket for test liquids / cleaning agents
Calibration solution, probe cleaner, sample water kit.
Metering valves, suction lances with reed contact,
Metering hoses, user manual and quick start guide.

Item no.: 11310

Factory assembly on
plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11901

descon®trol S
Version free chlorine / redox / pH / t
Complete system, consisting of:

descon®trol S measuring and control device free chlorine / redox / pH / t - **chlorine dosing using the potentiostatic measuring method** - with 2 descon dos E - stepper motor metering pumps, with wear-free stepper motor, metering capacity max. about 5 l/h.
Compact measuring cell 0410/B, incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Set of sensors for free chlorine / redox / pH / t.
Measuring cable set for free chlorine / redox / pH / t.
Wall bracket for test liquids / cleaning agents.
Calibration solution, probe cleaner, sample water kit.
Metering valves, suction lances with reed contact,
Metering hoses, user manual and quick start guide.

Item no.: 11410

Factory assembly on
plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11902

NEXT WATER GENERATION. ®

NEW, PRECISE, INNOVATIVE.

Welcome to the new product-world of descon®

The new generation descon-trol XV
will be launched in the season 2015
Measuring-, controlling- and dosing-systems
state of the art, innovative, easy operation,
related to practise experience of many years

Also available on request with descon mobil-trol one
– the mobile pool-control of descon®-

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MRDT | PROFESSIONAL

descon® trol XV PRO LINE

descon® measuring-, controlling- and dosing-system descon-trol XV PRO – professional line with touchpad for an easy and intuitive operation. Apart from the standard parameters free chlorine, redox, pH and temperature additional parameters can be selected based upon your requirements, e. g. total chlorine with display of combined chlorine, second free chlorine- or conductivity-measurement – all based on highest performance and reliable microprocessor-technology.

MEASURING, CONTROL AND DOSING TECHNOLOGY FOR A PROFESSIONAL WATER TREATMENT.

NEXT WATER GENERATION. ®
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descon® trol R

descon® measuring and control device for free chlorine and pH control, redox and temperature display, and sample water compensation. Relay output for drive of external actuators (e.g. metering pumps, solenoid valves, etc.), control: On-Off, P-PI pulse interval, pulse frequency. Modern wall mounting case IP 65, with extra large LCD display 120 x 40mm, 4-line, backlit. Intuitive, simple operation via membrane keyboard, plain text display. Language selection (German, English, French, Italian, Dutch and Russian). ASR automatic probe cleaning for chlorine sensor (potentiostatic measuring method), real time clock, sample water monitoring, automatic switch-on delay, container level control with status displays in plain text.

System components:

MCDT | PROFESSIONAL

descon®trol R - professional line
Version free chlorine / pH / t / device with measuring cable

Measuring and control device **descon®trol R** free chlorine / pH / t / **chlorine dosing / potentiostatic measuring method,** with measuring cable set for free chlorine / pH / t.

Item no.: 12300

descon®trol R - professional line
Version free chlorine / redox / pH / t / device with measuring cable

As described before, but in addition with redox measurement.

Item no.: 12400

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descon®trol R - professional line

Version free chlorine / pH / t with measuring section, consisting of:

Measuring and control device **descon®trol R**
free chlorine/pH/t
- **Chlorine dosing / potentiostatic measuring method** -
Compact measuring cell 0410/R incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Sensor set for free chlorine / pH / t.
Measuring cable set for free chlorine / pH / t.
Wall bracket for test liquids / cleaning agents.
Calibration solution, probe cleaner, sample water kit.

Item no.: 12310

Factory assembly on plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11904

descon®trol R - professional-line

Version free chlorine / redox / pH / t with measuring section, consisting of:

Measuring and control device **descon®trol R**
free chlorine / redox / pH / t
- **Chlorine dosing / potentiostatic measuring method** -
Compact measuring cell 0410/R incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Set of sensors for free chlorine / redox / pH / t.
Measuring cable set for free chlorine / redox / pH / t.
Wall bracket for test liquids / cleaning agents.
Calibration solution, probe cleaner, sample water kit.

Item no.: 12410

Factory assembly on plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11905

NEXT WATER GENERATION. ®
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descon®trol R - professional line

Version free chlorine / pH / t
Complete system with 2 metering pumps descon®dos mcs, consisting of:

Measuring and control device **descon®trol R**
free chlorine/pH/t
- **Chlorine dosing / potentiostatic measuring method** -
Compact measuring cell 0410/R incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Sensor set for free chlorine / pH / t.
Measuring cable set for free chlorine / pH / t.
Wall holder for test liquids / cleaning agents.
Calibration solutions, probe cleaners, sample water kit,
2 metering pumps **descon®dos mcs** incl. hose kit,
metering capacity up to 9 l/h, metering valves, suction lances with reed contact, metering hoses, operating instructions and quick start guide.

Item no.: 12311

Factory assembly on
plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11906

descon®trol R - professional-line

Version free chlorine / redox / pH / t
Complete system with 2 metering pumps descon®dos mcs, consisting of:

Measuring and control device **descon®trol R**
free chlorine / redox / pH / t
- **Chlorine dosing / potentiostatic measuring method** -
Compact measuring cell 0410/R incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the the entire fitting is easy to clean).
Set of sensors for free chlorine / redox / pH / t.
Measuring cable set for free chlorine / redox / pH / t.
Wall holder for test liquids / cleaning agents.
Calibration solutions, probe cleaners, sample water kit,
2 metering pumps **descon®dos mcs** incl. hose kit,
metering capacity up to 9 l/h, metering valves,
suction lance with reed contact, metering hoses,
operating instructions and quick start guide.

Item no.: 12411

Factory assembly on
plastic wall mounting panel incl. small parts, accessories, factory test report.

Item no.: 11907

NEXT WATER GENERATION. ®
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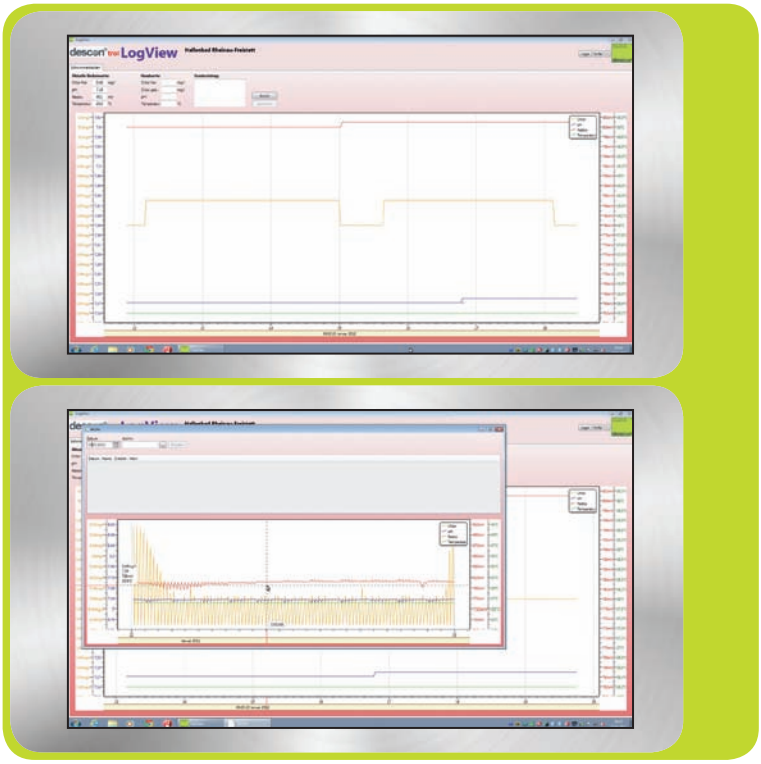
MCDT | LOGVIEW



descon® logview®

Modern PC software for display of the values currently measured by descon-trol measurement and control devices. It is possible to connect up to 31 measuring and control devices via the RS 485 bus, readout of values. Furthermore, the software is also used for a continuous recording of these values (electronic operating log). It is possible to enter the results of manual measurements and create special entries.
A visualization of measured values is done in the form of clear trend curves. All data and curves can be easily printed.

Via the standard RS 485 bus, the **descon® logview** can also read out measuring and control devices from other manufacturers. Therefore, this powerful software can also be used with upgrades or extensions of existing facilities. We will be happy to provide information for your specific application on request.

System requirements:
Standard PC with Windows operating system and USB port for software protection dongle (copy protection).

PC software descon® LogView

Item no.: 15200

Hardware / interface kit USB / RS 485 interface converter / dongle / hardlock

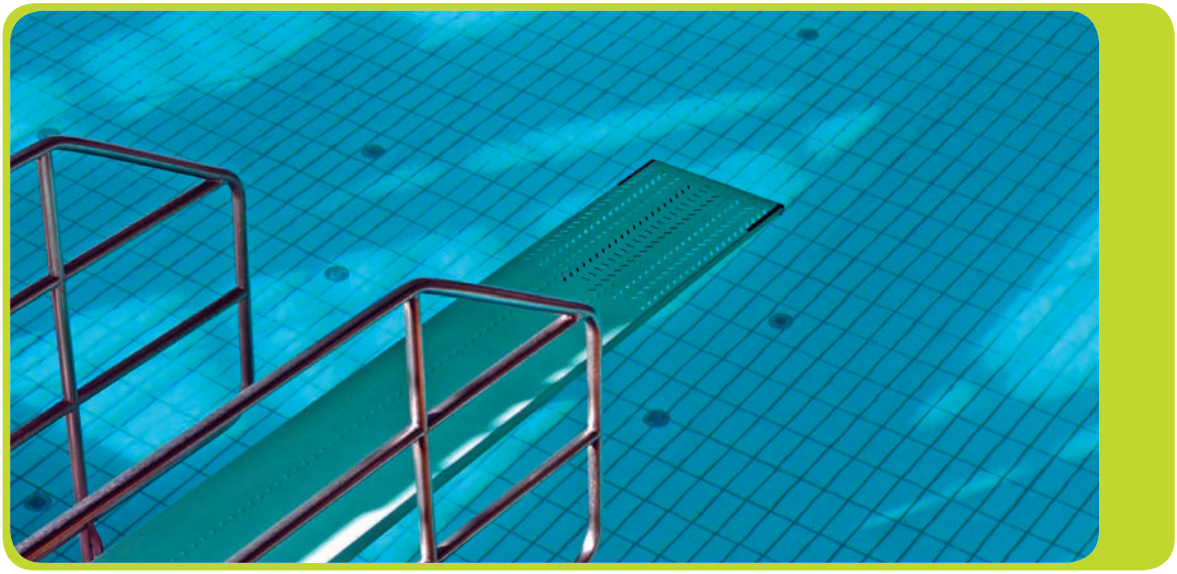
Item no.: 15210

Additional board for descon®trol RS 485 for descon®trol S and R, pluggable

Item no.: 15007

Additional board for analog output chlorine / pH / ORP / temperature for descon®trol S and R, pluggable

Item no.: 15008



NEXT WATER GENERATION. ®
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SINGLE-CHANNEL MEASURING DEVICES FOR A PROFESSIONAL WATER TREATMENT.

NEXT WATER GENERATION. ®

descon

MCDT | PROFESSIONAL

descon®trol M - Single-channel measuring devices

Microprocessor-controlled measuring and control devices for measuring values: free chlorine, pH, redox and conductivity. Compact design in splash-proof plastic housing with membrane keyboard. With backlit display, 60 x 15mm. 230 V, 50/60 Hz.

Relay outputs: P-PI controller adjustable as pulse interval, pulse frequency or continuous controller.
Analog output 0(4) - 20 mA.

Please order the measuring cable separately.
Devices for the measurement of chlorine dioxide and ozone on request.

descon®trol M free chlorine, 0.00 - 10.00 mg/l	**Item no.: 12100**
descon®trol M pH or Rx can be selected, pH: 0.00 - 14.00 pH | redox: - 1500 - + 1500 mV	**Item no.: 12101**
descon®trol M conductivity, measuring range: 0 - 2, 0 - 20, 0 - 200, 0 - 2000 mS/cm	**Item no.: 12102**
Inductive conductivity sensor with 6 m cable and built-in temperature sensor, material PP	**Item no.: 15028**
Measuring range: 0 - 2, 0 - 20, 0 - 200, 0 - 2000 mS/cm	
Flow valve for inductive conductivity sensor, material PVC	**Item no.: 15029**

descon®trol M Gas - Chlorine/ Ozone

Special features:

Measuring ranges within ppm range depending on sensor
Automatic sensor test, test cycle adjustable.
3 potential-free contacts for limit value 1,
limit value 2 and collective error message
Zero current safe - the effective direction
of the collective alarm relay can be reversed.
Display of relay status and error messages.

descon®trol M Gas - Chlorine / Ozone	**Item no.: 12110**
Chlorine gas sensor element: 0.00 .. 10.00 ppm chlorine	**Item no.: 15025**
Ozone gas sensor element: 0.00 .. 1.00 ppm ozone	**Item no.: 15026**
Gas sensor holder with 10 m cable	**Item no.: 15027**
Additional board for RS 485 for descon®trol M - pluggable	**Item no.: 15007**
ASR module (electronic sensor cleaning) for descon®	
Duplex chlorine sensor, pluggable, can be retroffited.	**Item no.: 15009**

NEXT WATER GENERATION. ®
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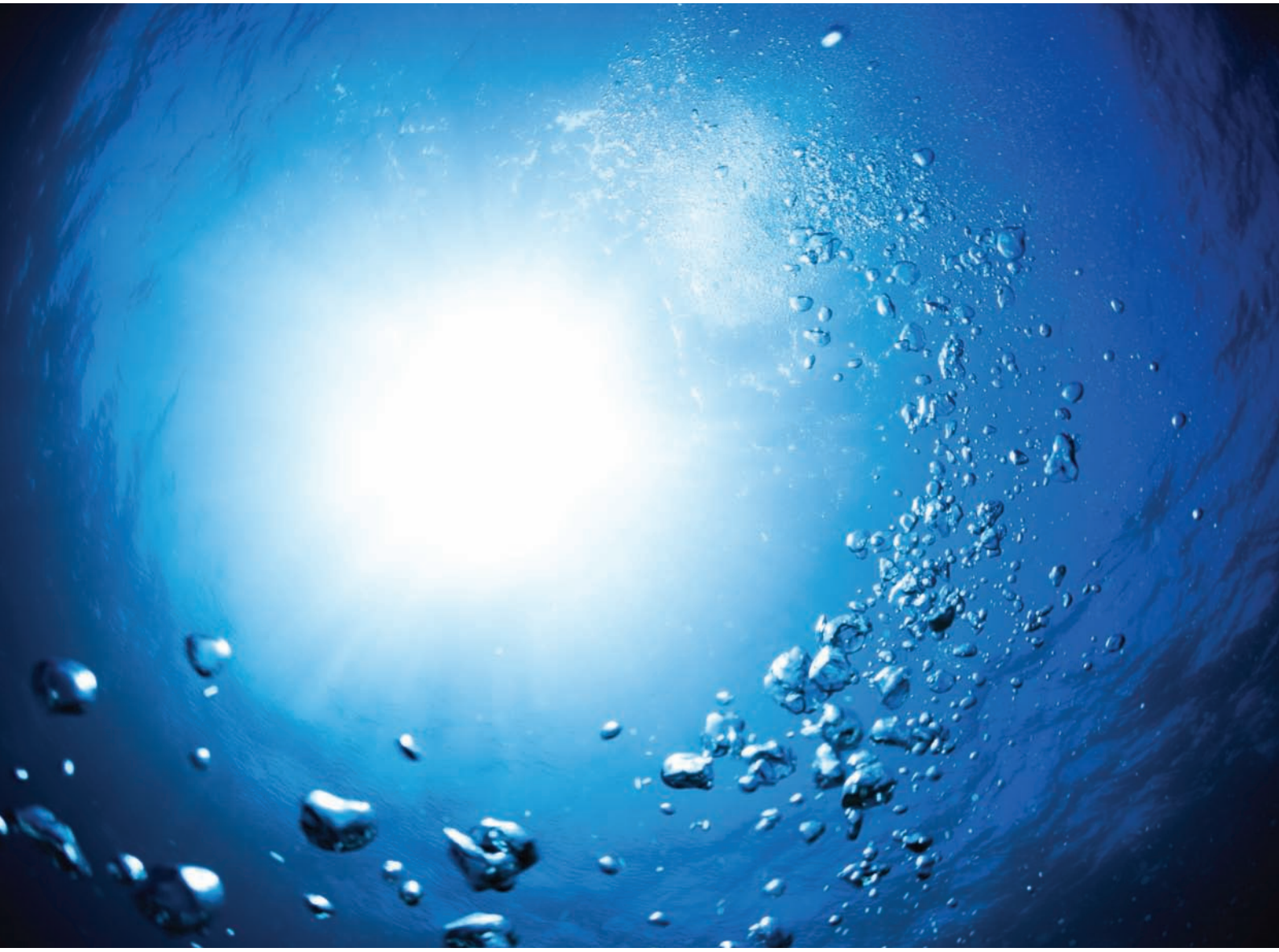
PERISTALTIC METERING PUMPS FOR A **PROFESSIONAL** WATER TREATMENT.



NEXT WATER GENERATION. ®

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descon® vision
Measuring, control and metering station for pH with wear-free stepper motor, consisting of:

Measuring and control station descon vision with wear-free stepper motor, metering capacity max. about 1 l/h. Compact measuring cell pH incl. sample water monitoring, sample water tap, fiber filter with integrated ball valve (the entire fitting is easy to clean), calibration solutions pH 7.0 and pH 4.0, probe cleaner, sample water kit, metering valves, suction lance with reed contact, metering hose, operating instructions.

Item no.: 13010

Factory assembly on plastic wall mounting panel incl. small parts, accessories.

Item no.: 11915

Peristaltic metering pump descon® vision for addition of flocculant, version with wear-free stepper motor with display

Universal, microprocessor-controlled peristaltic metering pump for an automatic addition of liquid dosing agents, for use in pool water treatment, also suitable for smallest quantities. Especially suitable for addition of flocculant. Metering pump driven by a stepper motor, max. metering capacity 16 ml/min. LCD display with 2x16 characters, 6 keys for an easy operation, LED for power, metering/setpoint, error. Potential-free control input or analog signal processing, alarm display, potential-free relay contact as output for error signal indication, rapid priming key, on/off switch, IP 65, including connection cable with length 2 m.

Special features:

- Wear-free stepper motor up to 1.0 l/h
- Real around-the-clock operation / 100% duty cycle
- LCD display
- Voltage 230 V, 50/60 Hz

Item no.: 13002

Peristaltic metering pump descon®dos sm Version with wear-free stepper motor

Universal, microprocessor-controlled peristaltic metering pump for an automatic addition of liquid dosing agents, for use in pool water treatment (chlorine, pH correction, flocculant and active oxygen products), also smallest quantities.
Max. delivery rate: 166 ml/min.
Recommended max. dosing quantity/operation hours per day: 180l / 24h
Recommended max. switch-on time at 0.5 bar counter pressure:
100% h for 24 h at <2/3 max. number of revolutions
or 50% h > 2/3 max. number of revolutions

Special features:
- Wear-free stepper motor up to 7.5 l/h or max. 2/3 of the nominal power
- Real around-the-clock operation / 100% duty cycle
- Hose connection 6/4 mm DN4
- Voltage 230 V, 50/60 Hz

Item no.: 13000

Peristaltic metering pump descon®dos mcs Version with geared motor using GCL technology

Universal, microprocessor-controlled peristaltic metering pump for an automatic addition of liquid dosing agents, for use in pool water treatment (chlorine, pH correction, flocculant and active oxygen products), even suitable for smallest quantities, with adjustable time and pump output.
Real control due to sophisticated and precise speed control using GCL technology.
Max. delivery rate: 150 ml/min.
Recommended max. dosing quantity / operating hours per day: 36 l / 12 h
Recommended max. switch-on time at 0.5 bar counter pressure: 50%/h;
100%/h for 12 h with a setting <1/3 max. number of revolutions and pump hose DLS 10.000 or smaller.

Special features:
- Precise speed control (CLC) technology.
- Hose connection 6/4 mm DN4
- Voltage 230 V, 50/60 Hz

Item no.: 13001

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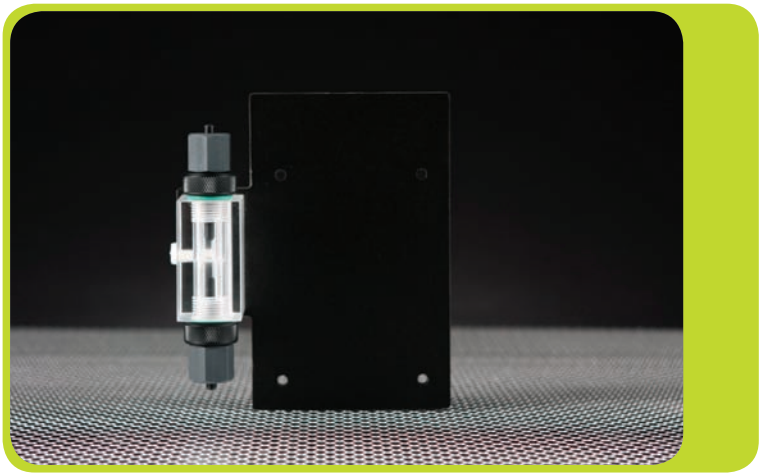

Flow control for descon® peristaltic metering pumps descon®dos sm / mcs / vision:

With wall mounting panel / drilling template for descon peristaltic metering pumps, for a visual inspection of the metering, metering hose connection for 6/4 mm.

Item no.: 13225

Pump hose kits for descon®dos ms / mcs / E / vision:

Version with high-quality PharMed pump hose with different dimensions.
DLS = max. metering capacity per hour at approx. 1.5 bar

DLS 10000 / PS 140 – 4.8x1, 6 PH, hose d = 8.0 mm, 120 – 10000 ml/h, for **descon®dos sm** — **Item no.: 13201**

DLS 9000 / DPSN 136 – 4, 8x2, 4 PH, hose d = 9.6 mm, 120 – 9000 ml/h, for **descon®dos mcs** — **Item no.: 13200**

DLS 4000 / PS 138 – 3.8x1, 6 PH, hose d = 6.4 mm, 50 – 4000 ml/h, for **descon®dos mcs / sm** — **Item no.: 13202**

DLS 3000 / PS 138 – 2.8x1, 6 PH, hose d = 5.6 mm, 25 – 3000 ml/h, for **descon®dos E / mcs / sm** — **Item no.: 13203**

DLS 1000 / PS 138 – 1.8x1, 6 PH, hose d = 4.8 mm, 15 – 1000 ml/h, for **descon®dos mcs / sm / vision** — **Item no.: 13204**

DLS 240 / PS 138 – 0.8x1, 6 PH, hose d = 4.0 mm, 5 – 240 ml/h, for **descon®dos mcs / sm** — **Item no.: 13205**

SENSORS MADE IN GERMANY. FOR ACCURATE MEASUREMENT RESULTS.

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descon® Sensors

descon® offers high-quality quality sensors - Made in Germany.
Supplied in secure, stable individual packagings in a sensor protection container with KCl solution. The production of the sensors is based on strict quality and manufacturing standards. Each sensor undergoes an extensive final inspection; the test data are included with the product. The serial number is found on the sensor head.

In addition to standard sensors, we offer sensors for system-specific applications on request.

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descon® pH sensor, for all device types with swivelling plug-in head

Measuring range:	0.00 to 14.00 pH
Length of shaft:	120 mm
Shaft material:	glass
Electrode material:	pH glass, ball
Reference system:	Ag/AgCl/ total KCl with salt stock
Diaphragm:	ceramics
Mech. connection:	S8 threaded plug head
Electrical connection:	2-pole screw connection

Item no.: 15010D

descon® redox sensor (V) without reference system - wear-free with swivelling plug-in head

Shaft material:	glass
Length of shaft:	120 mm
Measuring electrode:	platinum tip
Measuring range:	-1500 +1500 mV
Mech. connection:	S8 threaded plug head
Electrical connection:	2-pin plug connection

Item no.: 15011DK

descon® redox sensor (A) with reference system with swivelling plug-in head

Shaft material:	glass
Length of shaft:	120 mm
Measuring electrode:	platinum tip
Reference system:	Ag/AgCl/ total KCl with salt stock
Diaphragm material:	sintered ceramics
Temperature range:	-5 to 70 °C
Max. working pressure:	6 bar
Mech. connection:	S8 threaded plug head
Electrical connection:	2-pole screw connection

Item no.: 15012DK

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descon® chlorine sensor - potentiostatic with swivelling plug-in head

Shaft material:	glass
Length of shaft:	80 mm
Measuring electrode:	gold, ring
Reference system:	Ag/AgCl/ total KCl with salt stock
Diaphragm material:	sintered ceramics
Temperature range:	-5 to 70 °C
Max. working pressure:	6 bar
Mech. connection:	S8 threaded plug head
Electrical connection:	2-pole screw connection

Item no.: 15013D

descon® OxiActiv sensor, CHLORINE-FREE electrode - potentiostatic with swivelling plug-in head

Shaft material:	glass
Length of shaft:	80 mm
Measuring electrode:	plantinum, ring
Reference system:	Ag/AgCl/ total KCl with salt stock
Diaphragm material:	sintered ceramics
Temperature range:	-5 to 70 °C
Max. working pressure:	6 bar
Mech. connection:	S8 threaded plug head
Electrical connection:	2-pole screw connection

Item no.: 15014D

descon® chlorine duplex sensor - potentiostatic - Double gold combination electrode for measurement of free chlorine, chlorine dioxide or ozone

Shaft material:	glass
Length of shaft:	120 mm
Measuring electrode:	gold, upper ring
Counter electrode:	gold, lower ring
Reference system:	Ag/AgCl/ total KCl with salt stock
Diaphragm material:	sintered ceramics
Measuring range:	according to the used measuring amplifier
Temperature range:	-5 to 70 °C
Max. working pressure:	8 bar at 20 °C (pressure compensation via diaphragm)
Mechanical connection:	S8 threaded plug head
Electrical connection:	M12 screw connection (male)

Item no.: 15015D

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ACCESSORIES FOR descon® MEASURING, CONTROL AND DOSING TECHNOLOGY.

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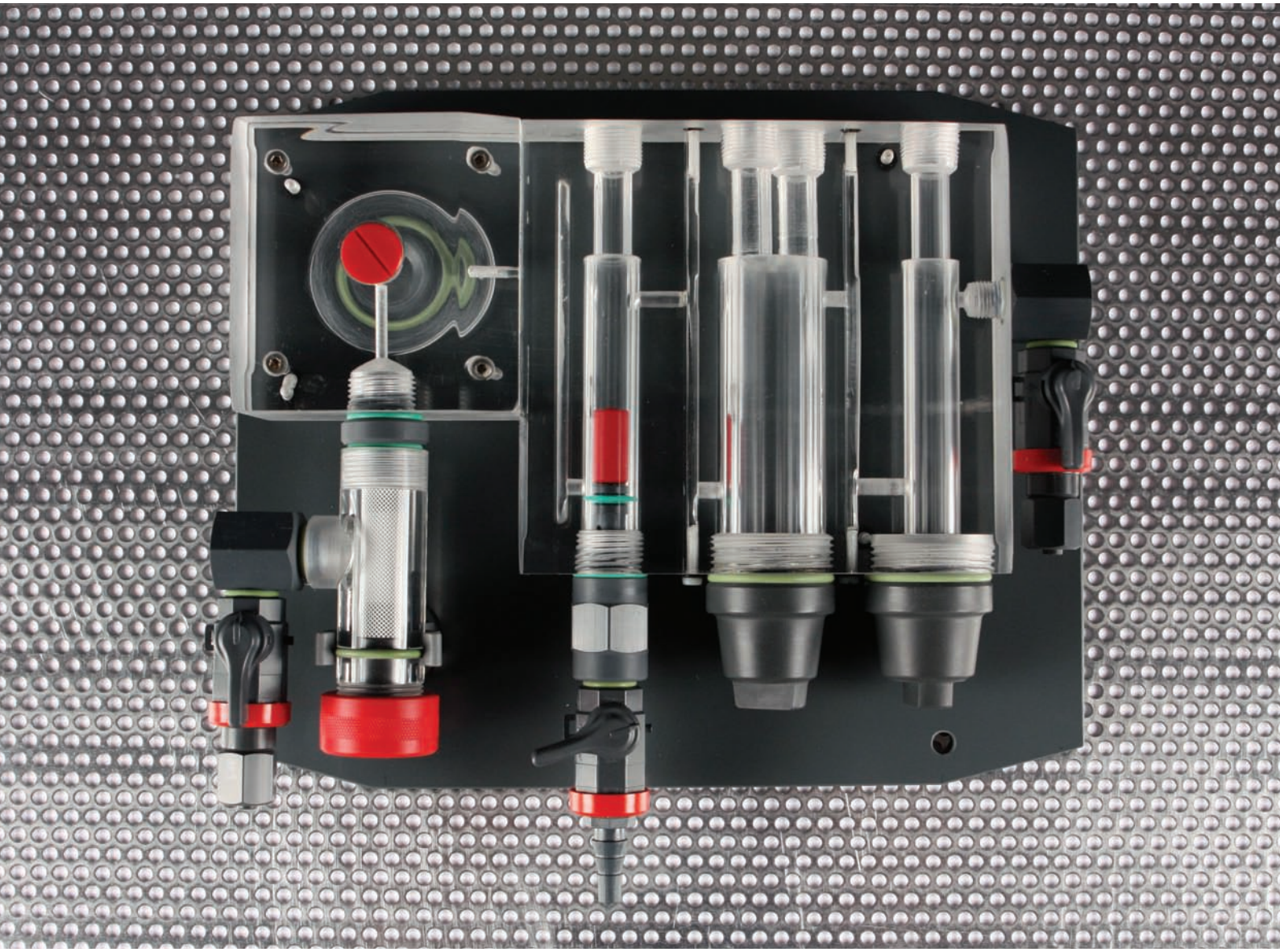
descon® Measuring cells

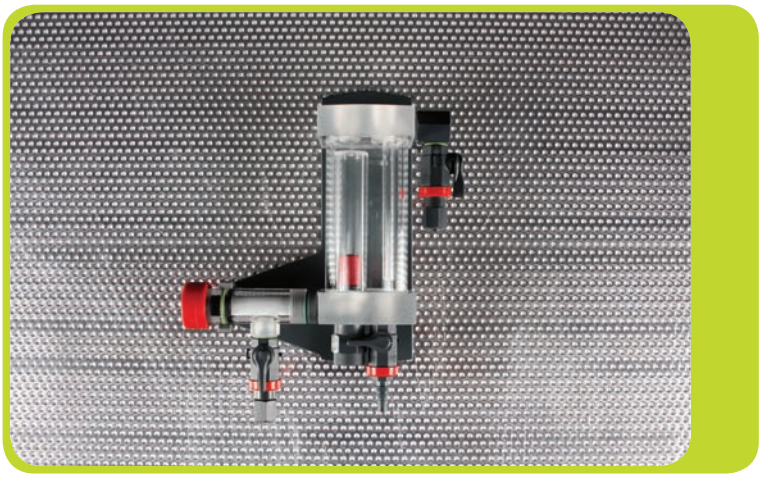
descon® compact measuring cells are made of high-quality Plexiglas® GS and are assembled on a base plate made of PVC. The sample water flow is visible at all times with all compact measuring cells. The design allows for a pressure operation (sample water return into the system) and operation with a free drain.

All models are supplied with an integrated filter and shut-off devices.

All chambers can be emptied and are easy to clean.



MCDT | ACCESSORIES



descon® compact measuring cell 0310 | R (round) for 3 sensors including fiber filter.

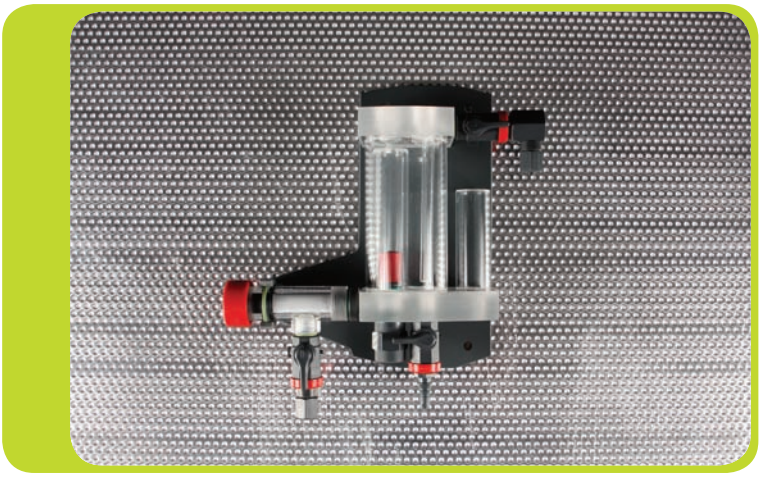
2 chambers, can be emptied and cleaned individually, for holding the measuring electrodes for redox and pH; temperature and sample water monitoring. Can be used for return of sample water (pressure operation) and as free drain. When using the compact measuring unit descon 0310/R only for measurement of pH or OxiActiv, one sensor mount is closed.
Integrated fine filter with replaceable strainer, shut-off valve on the inlet side with hose connection 8/6 mm.

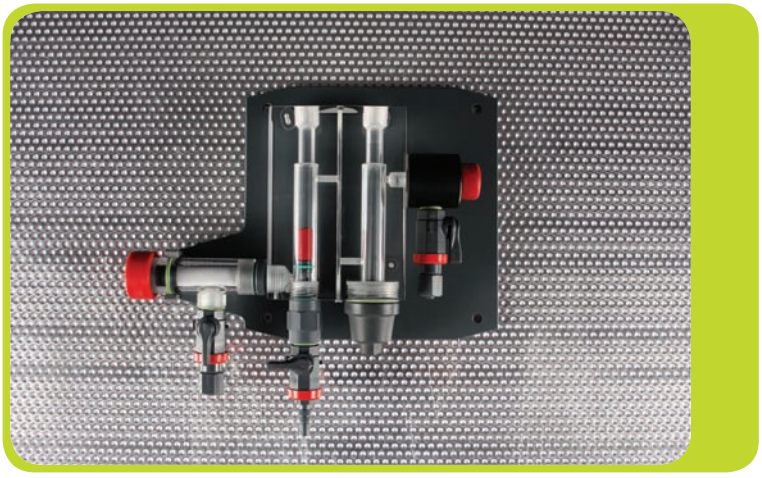
Item no.: 15000

descon® compact measuring cell 0312/R (round) for 3 sensors including fiber filter.

2 chambers, can be emptied and cleaned individually, for holding the pH measuring electrodes and, if required, the redox electrode; sample water monitoring incl. holder for impedance converter. When delivered, the 2nd chamber is closed with a screw plug. Can be used for return of sample water (pressure operation) and as free drain.
Integrated fine filter with replaceable strainer, shut-off valve on the inlet side with hose connection 8/6 mm.

Item no.: 15100





descon® compact measuring cell 0210 | B (block design) for 2 sensors incl. fiber filter.

2 chambers, can be emptied and cleaned individually, for holding measuring electrodes for free chlorine; temperature and sample water monitoring. Can be used for return of sample water (pressure operation) and as free drain.
Integrated fine filter with replaceable strainer, shut-off valve on the inlet side with hose connection 8/6 mm.

Item no.: 15001

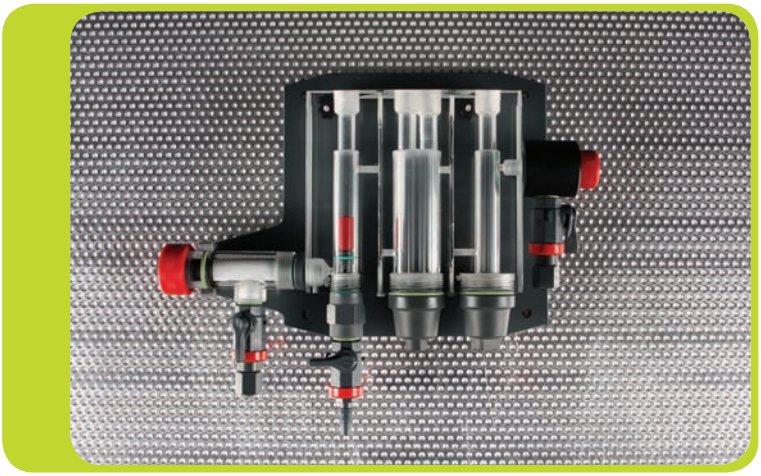
NEXT WATER GENERATION. ®

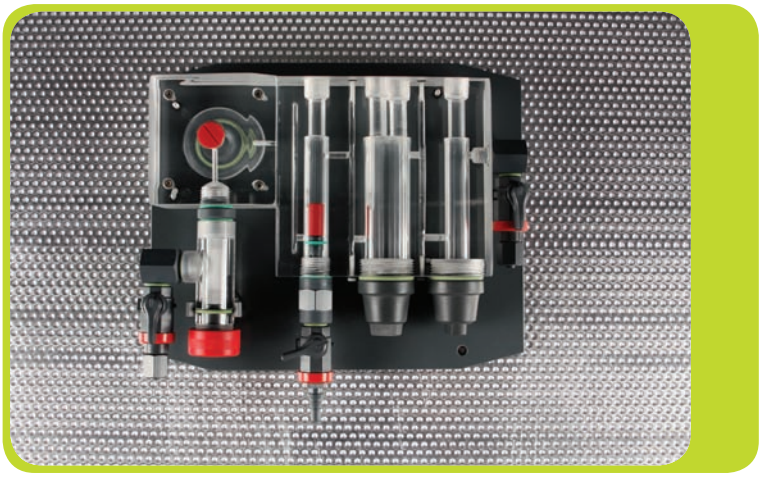
descon

descon® compact measuring cell 0410 | B (block design) for 4 sensors incl. fiber filter.

3 chambers, can be emptied and cleaned individually, for holding the measuring electrodes for free chlorine, redox and pH; temperature and sample water monitoring.
Can be used for return of sample water (pressure operation) and as free drain.
Integrated fine filter with replaceable strainer, shut-off valve on the inlet side with hose connection 8/6 mm.

Item no.: 15002





descon® compact measuring cell 0413 | B/D (block design) for 4 sensors with descon flow rate regulator, incl. fiber filter

3 chambers, can be emptied and cleaned individually, for holding the measuring electrodes for free chlorine, redox and pH; temperature and sample water monitoring.
Can be used for return of sample water (pressure operation) and as free drain.
Integrated fine filter with replaceable strainer, shut-off valve on the inlet side with hose connection 8/6 mm.
Additional equipment with flow rate regulator.

Item no.: 15111

descon® flow rate regulator incl. fiber filter

Flow rate regulator for individual use in front of descon® compact measuring cells. Made of high-quality Plexiglas® GS, with precise adjustment / control of the flow rate, with integrated fine filter with replaceable strainer, shut-off valve on the inlet side with hose connection 8/6 mm.

Item no.: 15110

MRDT | ACCESSORIES

Sensor cable

Standard black
for redox and pH,
version COAX-D-AE 1.20 m,
2-pin plug connection

Item no.: 15020

Sensor cable

Standard for free chlorine
and active oxygen,
version TRIAX-P-AE 1.20 m,
including reference cables.
2-pin plug connection

Item no.: 15021

Sensor cable with plug M 12

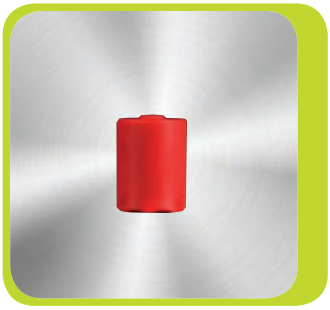
For descon® duplex chlorine
sensor PT 100/sample water
monitoring,
version WAKS4.5, 1.20 m

Item no.: 15022

Temperature sensor Pt 100 - STRK2010 with switching contact for sample water monitoring

For all descon® compact
measuring cells

Item no.: 15030



Reed contact float SRS2010

For all descon®
compact measuring cells

Item no.: 15031

PVC fiber filter transparent

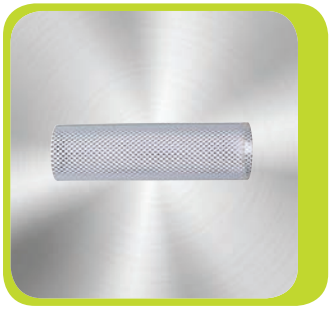
Connection 8/6 mm made of
PVC with wall mounting

Item no.: 15037

Strainer pipe 0.5 mm

For fiber filter for
compact measuring cell
0310/R, 0210/B and 0410/B
and item no. 15037

Item no.: 15034



Holder for test liquids

1 space
for one test liquid

Item no.: 15038

MRDT | ACCESSORIES

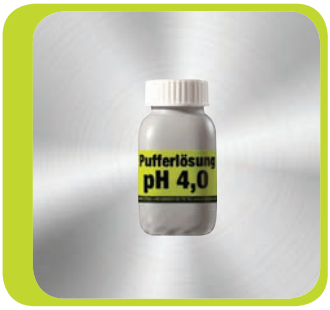
Clamp for test liquids

5 spaces for
test liquids, cleaners

Item no.: 15039

Buffer solution pH 7.0 - 50 ml

Item no.: 15040



Buffer solution pH 4.0 - 50 ml

Item no.: 15041

Redox solution 475 mV - 50 ml

Item no.: 15042

Probe cleaner liquid, acidic - 50 ml

Item no.: 15059

Precious metals cleaning paste

For sensors
with precious metal ring

Item no.: 15060

Sample water line PE 8/6 mm

Standard green
Use with sample water

Item no.: 15045

Metering hose PE 6/4 mm

Standard green
Use with pH Minus, pH Plus
and flocculation

Item no.: 15046

NEXT WATER GENERATION. ®

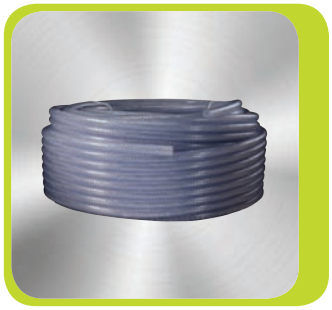
descon

MRDT | ACCESSORIES

Metering hose PTFE, 6/4 mm

Use with liquid chlorine and active oxygen

Item no.: 15047



Metering hose PVC, fabric-reinforced, 12/6 mm

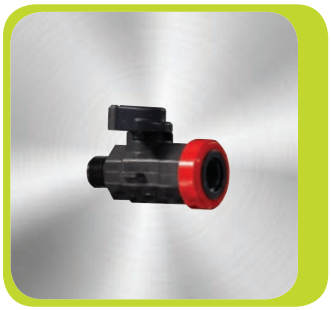
Use with pH minus, pH plus and liquid chlorine

Item no.: 15048

Ball valve PVC, DN 6 - 1/4“,

For sample water

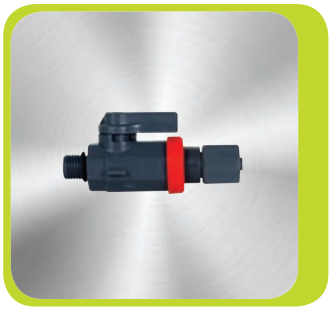
Item no.: 15054



Ball valve PVC, DN 6 - 1/4“,

For sample water, connection 8/6 mm PVC

Item no.: 15056



Sample water extraction

With ball valve Connection 8/6 mm PVC immersion tube 65 mm

Item no.: 15055

Suction lance

Rigid, adjustable in height with empty warning for Container 20-30 l, connection DN4 - 6/4 mm, including screw- cap MUE 61;

Item no.: 15065

Suction lance

Rigid, adjustable in height with empty warning for Container 20-30 l, connection DN8 - 12/6 mm, including screw cap MUE 61;

Item no.: 15066

Metering valve 30 PVC

With connection DN4-6/4 mm, immersion tube depth: 30 mm

Item no. 15069

NEXT WATER GENERATION. ®

descon

MRDT | ACCESSORIES

Metering valve 70 PVC

With connection DN4-6/4 mm, immersion tube depth: 70 mm

Item no. 15069OR

Metering valve 90 PVC

With connection DN4-6/4 mm, immersion tube depth: 90 mm

Item no. 15070

Metering valve Combined connection PVC,

R 1/2" connection
DN4 6/4 mm, DN8 - 8/6 mm, 12/6 mm and for PVC pipe d = 16 mm

Item no.: 15071

Metering valve 80 PVC

Can be cleaned with ball valve, R 1/2" connection DN4-6/4 mm, immersion tube depth: 80 mm with mechanical locking device Other connections are possible.

Item no.: 15072S

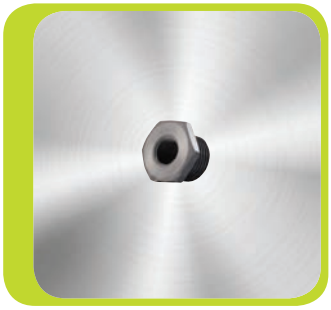
Immersion pipe

For metering valves DN4-6/4mm that can be cleaned Overall length: 270 mm / immersion tube depth: 80 mm Other connections are possible.

Item no.: 15073S

Reducer PVC 1/2" to 1/4"

Item no.: 15074



Flow monitor without T-piece

Item no.: 53060

Hose connection made of PVC 8/6 mm

Straight

Item no.: 15053

Angle

Item no.: 15052

NEXT WATER GENERATION. ®
descon

pH-T tester

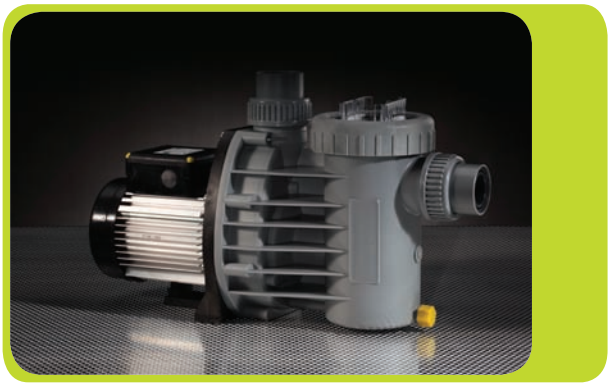
Device for testing and simulation PH-T with digital display

Primary use:
Check of pH and redox electrodes.
Check of pH and redox measuring inputs and cables.
Special features:
High-impedance test, voltage measurement in mV, default tensions in mV or pH, battery operation

Item no.: 15075

Chlorine simulator

Item no.: 15075CS



Sample water pump

Sample water pump, self-priming in plastic casing with fiber filter, model 1, delivery rate: 4 m^3/h at 6 m WC, 230 V, 50 Hz

Item no.: 15080

Bracket

Bracket for sample water pump
made of PVC 400x220x95 mm incl. fastener

Item no.: 15081

Sample water return system MRA 71

Sample water return system MRA 71
for return of the sample water in private and municipal pools. Container made of black PE, contents 75 l, with inlet, ventilation connection, built-in submerged pump, including float switch and non-return valve. Capacity max. 10 m^3/h with 9 m WC, 230 V, 50 Hz

Item no.: 15085

descon® safety tray 40 l with carrying handle made of PE, black

Size: 40 x 40 x 33 cm
For supply units with a content of 25/30 l

Item no.: 15090

NEXT WATER GENERATION. ®

descon

descon® test

With the **descon® test**, **descon®** provides an LED photometer for continuous control measurements in the areas of pool and drinking water. In addition to the disinfectants Cl_2, ClO_2, O_3, it is possible to test iron, ammonium, and other important parameters. An easy to understand user interface and handling of the device and reagents facilitate the daily measurements.

There are quality-tested reagents available for 15 measurement parameters.

NEXT WATER GENERATION. ®
descon

descon®test photometers for water analysis

Digital LED photometer for all areas of water analysis.
LCD plain text display for an easy interactive operation.
The device is equipped with 2 LEDs, which allows a measurement in different colour spectra.
The overall design ensures an easy and safe handling.

Measured parameters:

Chlorine (free chlorine):	0 - 5 mg /l
Total chlorine:	0 - 5 mg/l
Ozone:	0 -1 mg /l
Chlorine dioxide:	0 - 2 mg /l
pH:	6 - 8.3
Cyanuric acid	0 - 100 mg /l
Iron:	0.01 - 0.7 mg /l
Acid capacity KS 4.3:	0 - 5 mmol
Aluminium:	0 - 0.5 mg /l
Ammonium:	0 - 0.5 mg/l
Nitrate LO:	0 - 5 mg/l
Nitrate HI:	4 - 100 mg/l
Manganese:	0 - 0.03 mg/l
Phosphate:	0 - 4 mg/l
Chloride:	0 - 250 mg/l

Scope of delivery / equipment descon®test analysis kit:

Instrument case
descon®test photometer
2 measuring tubes-,
plug-,
rammer

Reagents for determination of:
free chlorine, total chlorine, ozone, pH and chlorine dioxide

4 batteries (Mignon), documentation

descon®test plus additionally with electronic pH-measurement

Item no.: 31100

Measurin tube round for descon®test photometer

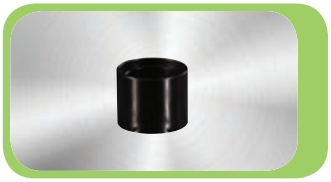
Item no.: 35000

Rammer for tablets

Item no.: 35003

Plug for Measuring tube for descon®test photometer

Item no.: 35001



Light protection tube for descon®test photometer

Item no.: 35002

NEXT WATER GENERATION. ®
descon

WATER | **ANALYSIS**

Chlorine reagent DPD A, for approx. 60 analyses

Item no.: 33102

Chlorine reagent DPD B, for approx. 60 analyses

Item no.: 33103

Chlorine reagent DPD C, for approx. 60 analyses

Item no.: 33104

pH reagent for approx. 140 analyses

Item no.: 33105

Iron reagent, for approx. 60 analyses

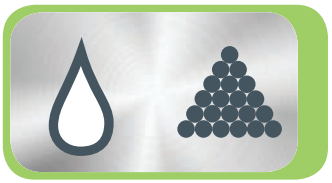
Item no.: 33108

Acid capacity reagent for approx. 70 analyses

Item no.: 33121

Aluminium reagent for 10 analyses (TAB 1+2)

Item no.: 33120

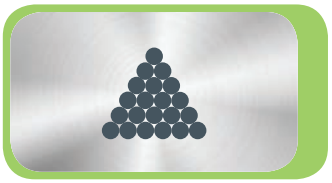


Ammonium reagent for about 100 analyses

Item no.: 33106

Chloride reagent for approx. 20 analyses

Item no.: 33107

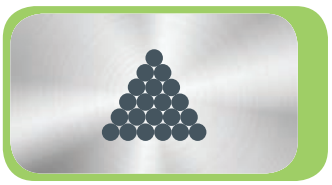


Nitrate reagent for approx. 80 analyses

Item no.: 33110

Cyanuric acid reagent for 10 analyses

Item no.: 33111



Copper reagent for approx. 100 analyses

Item no.: 33114

Phosphate reagent for 10 analyses

Item no.: 33115

Ozone reagent for approx. 60 analyses

Item no.: 33123

Total water hardness reagent for 10 analyses

Item no.: 33125

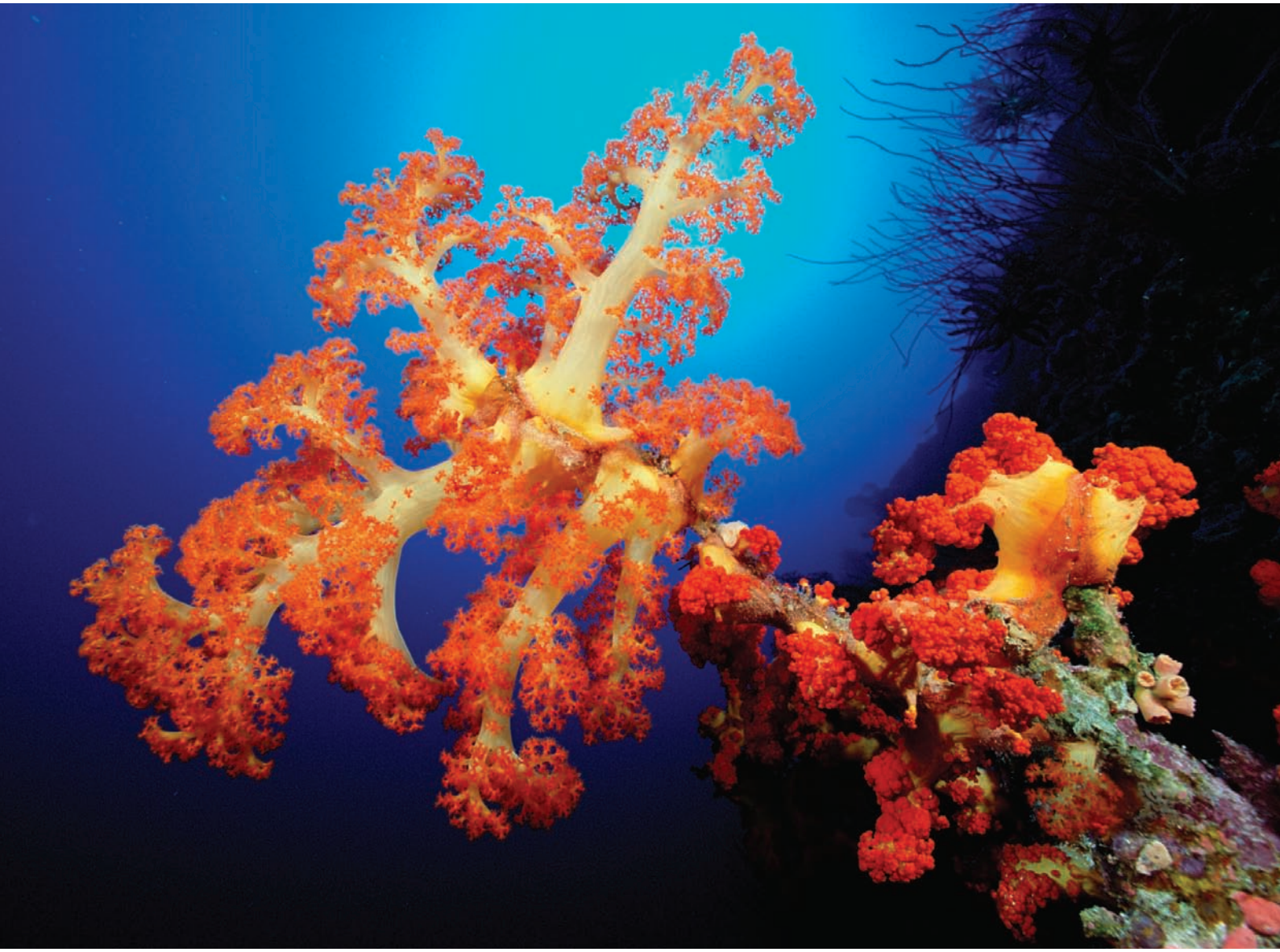
Manganese reagent for 10 analyses (1+2 TAB)

Item no.: 33117

NEXT WATER GENERATION. ®

descon

FILTER TECHNOLOGY AND ACCESSORIES FOR PRIVATE POOLS.



NEXT WATER GENERATION. ®

descon

descon® filter home

descon® home filter tanks in high-quality, fibre-glass reinforced polyester (GRP) with protective sealing inside, automatic and manual tank ventilation, gauge holder, pressure gauge, tank drain, inside piping and filter star in corrosion-resistant plastics. Tested quality and a high level of security as a result of decades of experience and an acknowledged production know-how in the processing of polyester (hand lamination process).

FILTER | **BASIC**

NEXT WATER GENERATION. ®
descon

descon® home basic

descon® home basic filter tanks in high-quality, fibre-glass reinforced polyester (GRP) with protective sealing inside, automatic and manual tank ventilation, gauge holder, pressure gauge, tank drain, inside piping and filter star in corrosion-resistant plastics, as well as a large filling/maintenance port, incl. protective caps made of plastic for screw heads.

Operating pressure:	**max. 2.0 bar**
Test pressure:	**2.6 bar**
Tank colour:	**descon® green**
Filter base / cover / protective caps:	**black**
Operating temperature:	**max. 40°C**

For additional technical details and application recommendations, see the following table.

Tank d = mm	Tank height mm	Filter area m^2	For pools up to m^3	Volume flow m^3/h	Filling port DN	Maintenance port DN	Item no.
500	630	0.20	50	10	210	x	51000
610	735	0.29	75	15	210	x	51001
765	760	0.46	115	23	210	x	51002
920	940	0.65	165	33	210	x	51003
1080	1110	0.92	230	46	210	x	51004
1250	1550	1.23	310	62	430	x	51005
1400	1750	1.54	385	77	430	177	51006
1600	1900	2.02	500	100	500	177	51007
1800	2030	2.55	640	128	500	177	51008

Filling table

Filter model home	Diameter mm	SF = sand filter	Quartz sand 0.40-0.80 mm Item no.: 55100
basic	500	SF	100 kg
basic	610	SF	175 kg
basic	765	SF	300 kg
basic	920	SF	500 kg
basic	1080	SF	850 kg
basic	1250	SF	1400 kg
basic	1400	SF	2200 kg
basic	1600	SF	2900 kg
basic	1800	SF	3900 kg

NEXT WATER GENERATION. ®
descon

FILTER | **BASIC PLUS**

NEXT WATER GENERATION. ®

descon

FILTER | BASIC PLUS

descon® home basic plus

descon® home basic plus filter tanks in high-quality, fibre-glass reinforced polyester (GRP) with protective sealing inside, automatic and manual tank ventilation, gauge holder, pressure gauge, tank drain, inside piping and filter star in corrosion-resistant plastics, as well as a large filling/maintenance port, incl. protective caps made of plastic for screw heads.

Operating pressure:	**max. 2.0 bar**
Test pressure:	**2.6 bar**
Tank colour:	**descon® green**
Filter base / cover / protective caps:	**black**
Operating temperature:	**max. 40°C**

For additional technical details and application recommendations, see the following table.

Tank d = mm	Tank height mm	Filter area m^2	For pools up to m^3	Volume flow m^3/h	Filling port DN	Item no.
500	630	0.20	50	10	290	51010
610	735	0.29	75	15	290	51011

Filling table

Filter model home	Diameter mm	SF = sand filter	Quartz sand 0.40-0.80 mm Item no.: 55100
basic plus	500	SF	100 kg
basic plus	610	SF	175 kg

NEXT WATER GENERATION. ®

descon

FILTER|PREMIUM

NEXT WATER GENERATION.®

descon

descon® home premium series - high-bed filters with filter star

descon® home premium filter tanks in high-quality, fibre-glass reinforced polyester (GRP) with protective sealing inside, automatic and manual tank ventilation, gauge holder, pressure gauge, tank drain, inside piping and filter star in corrosion-resistant plastics, as well as a large filling port and lateral maintenance port, incl. protective caps made of plastic for screw heads.

Operating pressure:	**max. 2.0 bar**
Test pressure:	**2.6 bar**
Tank colour:	**descon® green**
Filter base / cover / protective caps:	**black**
Operating temperature:	**max. 40°C**

For additional technical details and application recommendations, see the following table.

Tank d = mm	Tank height mm	Filter area m^2	For pools up to m^3	Volume flow m^3/h	Filling port DN	Maintenance port DN	Item no.
500	950	0,20	50	10	210	without	51019
610	1080	0.29	75	15	210	177	51020
765	1150	0.46	115	23	210	177	51021
920	1150	0.65	165	33	210	177	51022

Filling table

Filter model home	Diameter mm	SF = sand filter	Quartz sand 0.40-0.80 mm Item no.: 55100	Quartz sand 0.75-1.25 mm Item no.: 55101	Quartz sand 1.00-2.00 mm Item no.: 55102
premium	500	SF	150 kg	-	-
premium	610	SF	175 kg	25 kg	25 kg
premium	765	SF	300 kg	25 kg	25 kg
premium	920	SF	425 kg	50 kg	50 kg

NEXT WATER GENERATION. ®

descon

FILTER | **EXCLUSIV**

NEXT WATER GENERATION. ®

descon

FILTER | EXCLUSIV

descon® home EXCLUSIV series - high-bed / multi-layer filters with filter star

descon® home exclusiv filter tanks in high-quality, fibre-glass reinforced polyester (GRP) with protective sealing inside, automatic and manual tank ventilation, gauge holder, pressure gauge, tank drain, inside piping and filter star in corrosion-resistant plastics, as well as a large filling port and lateral maintenance port, incl. protective caps made of plastic for screw heads.

Operating pressure:	**max. 2.0 bar**
Test pressure:	**2.6 bar**
Tank colour:	**descon® green**
Filter base / cover / protective caps:	**black**
Operating temperature:	**max. 40°C**

For additional technical details and application recommendations, see the following table.

Tank d = mm	Tank height	Filter area m²	For pools up to m³	Volume flow m³/h	Filling port DN	Maintenance port DN	Revision port DN	Item no.
500	1500	0,20	50	10	210	210	x	51029
610	1500	0.29	75	15	210	210	x	51030
765	1500	0.46	115	23	210	210	x	51031
920	1920	0.65	165	33	210	210	x	51032
1080	1920	0.92	230	46	430	430	x	51033
1250	2000	1.23	310	62	430	430	x	51034
1450	2200	1.66	415	83	500	500	177	51035
1800	2200	2.55	640	128	500	500	177	51036

Filling table

Filter model home	Diameter mm	SF = sand filter	Quartz sand 0.40-0.80 mm Item no. 55100	Quartz sand 0.75-1.25 mm Item no.: 55101	Quartz sand 1.00-2.00 mm Item no.: 55102
exclusiv	500	SF	200 kg	25 kg	25 kg
exclusiv	610	SF	300 kg	50 kg	50 kg
exclusiv	765	SF	350 kg	100 kg	100 kg
exclusiv	920	SF	850 kg	100 kg	100 kg
exclusiv	1080	SF	1200 kg	150 kg	150 kg
exclusiv	1250	SF	1800 kg	200 kg	200 kg
exclusiv	1450	SF	2250 kg	250 kg	250 kg
exclusiv	1850	SF	3600 kg	450 kg	450 kg

Filter model home	Diameter mm	MF = Multi-layer filter	Quartz sand 0.40-0.80 mm Item no.: 55100	Quartz sand 0.75-1.25 mm Item no.: 55101	Quartz sand 1.00-2.00 mm Item no.: 55102	HYDRO* SORB100 0.6-2.36 mm Item no.: 55104
exclusiv	500	MF	150 kg	25 kg	25 kg	25 kg
exclusiv	610	MF	200 kg	50 kg	50 kg	25 kg
exclusiv	765	MF	250 kg	100 kg	100 kg	50 kg
exclusiv	920	MF	700 kg	100 kg	100 kg	50 kg
exclusiv	1080	MF	950 kg	150 kg	150 kg	75 kg
exclusiv	1250	MF	1500 kg	200 kg	200 kg	100 kg
exclusiv	1450	MF	1900 kg	250 kg	250 kg	125 kg
exclusiv	1850	MF	3100 kg	450 kg	450 kg	175 kg

*** Alternative to hydro-anthracite H in case of high loads.**

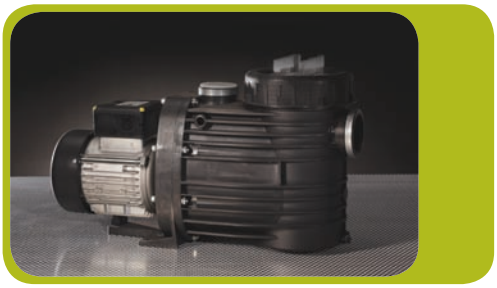
NEXT WATER GENERATION. ®

descon

FILTER | PUMPS

BADU MAGIC
Circulation pumps self-priming

Version	m³/h at 7mWC	Volt	kW	Item no.:
BADU MAGIC 6	6.5	230 V	0.45	54002
BADU MAGIC 8	9.0	230 V	0.60	54003
BADU MAGIC 11	12.0	230 V	0.69	54004



BETTAR
Circulation pumps self-priming

Version	m³/h at 7mWC	Volt	kW	Item no.:
BADU BETTAR 8	9.5	230 V	0.58	54010
BADU BETTAR 12	12.0	230 V	0.69	54011
BADU BETTAR 14	15.0	230 V	0.97	54012

BADU Eco Touch-pro / BADU 90 Eco VS
Circulation pumps self-priming with speed control

With LED display for indication of the current speed of the pump.
Control panel for programming and control of individual speeds
and changing of priming time and priming speed.

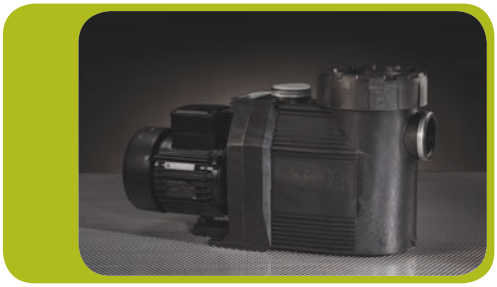
Pump control adjusted to the Eco Touch-pro and individually adjustable, with command plus bw ECO, item no. 53013 (see filter controls).

Version	Volt	kW	Item no.:
BADU Eco Touch-pro	230 V	0.08 - 1.05	54053
BADU 90 Eco VS	230 V	0,08 - 1,40	54054

NEXT WATER GENERATION. ®
descon

Rated in kW = power consumption (P1)

BADU 90
Circulation pumps self-priming



Version	m³/h at 7mWC	Volt	kW	Item no.:
BADU 90/7	8.0	230 V	0.50	54020
BADU 90/11	12.0	230 V	0.69	54022
BADU 90/13	15.0	230 V	0.85	54024
BADU 90/15	18.0	230 V	1.10	54026
BADU 90/20	20.0	230 V	1.40	54028
BADU 90/25	26.0	230 V	1.85	54030
BADU 90/30	32.0	230 V	2.00	54032
BADU 90/40	42.0	230 V	2.90	54034
BADU 90/48	50.0	230 V	3.45	54036

Version	m³/h at 7mWC	Volt	kW	Item no.:
BADU 90/7	8.0	400 V	0.44	54021
BADU 90/11	12.0	400 V	0.66	54023
BADU 90/13	15.0	400 V	0.75	54025
BADU 90/15	18.0	400 V	0.97	54027
BADU 90/20	20.0	400 V	1.24	54029
BADU 90/25	26.0	400 V	1.62	54031
BADU 90/30	32.0	400 V	1.85	54033
BADU 90/40	42.0	400 V	2.64	54035
BADU 90/48	50.0	400 V	3.10	54037

BADU Resort
Circulation pumps self-priming

Version	m³/h at 10mWC	Volt	kW	Item no.:
BADU Resort 30	32.5	400 V	1.85	54060
BADU Resort 40	40.0	400 V	2.64	54061
BADU Resort 45	45.0	400 V	3.10	54062
BADU Resort 50	50.0	400 V	3.55	54063
BADU Resort 55	55.0	400 V	4.66	54064
BADU Resort 60	50.0	400 V	3.10	54065
BADU Resort 70	65.0	400 V	3.55	54066
BADU Resort 80	80.0	400 V	4.66	54067
BADU Resort 110	110.0	400 V	6.35	54068

Rated in kW = power consumption (P1)

NEXT WATER GENERATION. ®
descon

descon® command

descon® command

Multifunctional digital filter control descon command with illuminated LCD display in proven microprocessor technology in wall mounting case. Easy and user-friendly menu navigation with plain text display, display backlit.

Equipment and functions:

Filter operation manual/automatic, filter time program, automatic heating; temperature display, service display for filter and heating operation times; Language selection: German, English, French, Russian. Incl. temperature sensor. Immersion pipe not included in the delivery - please order separately (item no. 55115). Protection class: IP 65
Supply voltage: 230 V, 50/60 Hz

Item no.: 53010

descon® command plus

descon® command plus / command plus bw / command plus bw ECO series

Filter control, auto/manual, temperature, time, solar, level.
Digital, universal filter control descon command plus with backlit LCD display in proven microprocessor technology in wall mounting case. Easy, user-friendly menu navigation with plain text display.

Standard equipment and basic functions:

Filter operation manual/automatic, filter time program, automatic heating, temperature display, interval display, display of backwash intervals, operating hours counter filter pump and heating, filter pump run-on, incl. error message, flow control, connection for measuring, control and metering equipment, service display, incl. temperature sensor.
Manual parameter setting of outputs (relays) possible. This allows an activation of special functions.
Immersion pipe not included in the delivery - please order separately (item no. 55115).
Protection class: IP 65
Supply voltage: 230 V, 50/60 Hz

FILTER | CONTROLS

descon® command plus

OPTIONS:
A connection of additional **descon®** components provides further functions.
SOLAR-control: by connecting a temperature sensor SOLAR PT 1000, length 10 or 20 meters. Temperature sensor to be ordered separately, item no. 55112 or 55113.
Skimmer control: by connecting a **descon® niveau compact** with 5 meter cable. Sensor to be ordered separately, item no. 55108
Collection container control: by connecting a descon ultrasonic sensor with 3 meter cable.
Ultrasonic sensor to be ordered separately; item no. 55110

Refer to the Service Manual when connecting additional options, and make your selection!

Item no.: 53011

descon® command plus bw

Additional standard equipment:
Output/control for **descon® BACKWASH automatic backwash valves** or control of **BESGO automatic backwash valve**s.
Please order the automatic backwash valves separately.

OPTIONS:
A connection of additional **descon®** components provides further functions.
SOLAR-control: by connecting a temperature sensor SOLAR PT 1000, length 10 or 20 meters. Temperature sensor to be ordered separately, item no. 55112 or 55113.
Skimmer control: by connecting a **descon® niveau compact** with 5 meter cable. Sensor to be ordered separately, item no. 55108
Collection container control: by connecting a descon ultrasonic sensor with 3 meter cable.
Ultrasonic sensor to be ordered separately; item no. 55110

When connecting additional options, refer to the Service Manual, and make your selection!

Item no.: 53012

descon® command plus bw eco

Additional standard equipment:
Output/control for **descon® backwash** automatic backwash valves or control of **BESGO automatic backwash valves**.
Please order the automatic backwash valves separately. Motor control for Badu EcoTouch and EcoTouch-pro. The pumps can be individually controlled via the revolution speed. Automatic / manual / backwash / solar.

OPTIONS:
A connection of additional descon® components provides further functions.
SOLAR-control: by connecting a temperature sensor SOLAR PT 1000, length 10 or 20 meters.R Temperature sensor to be ordered separately, item no. 55112 or 55113.
Skimmer control: by connecting a **descon® niveau compact** with 5 meter cable. Sensor to be ordered separately, item no. 55108
Collection container control: by connecting a descon ultrasonic sensor with 3 meter cable.
Ultrasonic sensor to be ordered separately; item no. 55110
Refer to the Service Manual when connecting additional options, and make your selection!

Item no.: 53013

NEXT WATER GENERATION. ®
descon

descon® backwash

descon® BACKWASH automatic backwash valve

Digital backwash control descon BACKWASH with backlit alphanumeric display in proven microprocessor technology in wall mounting case.
Easy and user-friendly menu navigation with plain text display. The control is mounted right on the 6-way central valve (make: Praher) of the filter system.
descon® backwash is simply exchanged with the manual lever on the 6-way central valve.
Design for 6-way central valves 1 1/2" and 2" (make: Praher).
Functionality only available in connection with a
descon® command plus backwash.
(item no. 53012). To be ordered separately.

Standard equipment and basic functions:
Programming of backwash times,
display of backwash intervals,
service displays
Protection class: IP 65
Supply voltage: 230 V, 50/60 Hz

Item no.: 53020

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descon® backwash plus automatic filter and backwash control

Digital **descon® backwash plus filter control / backwash control** with backlit LCD display in modern microprocessor technology in wall mounting case. Easy and user-friendly menu navigation with plain text display.

Standard equipment and basic functions:
Filter operation manual/automatic, filter time program, automatic heating, temperature display, interval display, backwash cycle counter, operating hours counter filter pump and heating, filter pump run-on, incl. error message, flow control, connection for measuring, control and metering equipment, service display, incl. temperature sensor.
The immersion tube is not included in the delivery - please order separately. Item no. 55115
Protection class: IP 65
Supply voltage: 230 V, 50/60 Hz
Dimensions: 240 x 160 x 90 mm

OPTIONS:
A connection of additional **descon®** components provides further functions.

SOLAR-control: by connecting a temperature sensor SOLAR PT 1000, length 10 or 20 meters.
Temperature sensor to be ordered separately,
item no. 55112 or 55113

Skimmer control: by connecting a **descon® niveau compact** with 5 meter cable. Sensor to be ordered separately,
item no. 55108

Collection container control: by connecting a **descon® ultrasonic sensor** with 3 meter cable.
Ultrasonic sensor to be ordered separately,
item no. 55110
Additional functions:
Control of water level in balance tank, solenoid valve OPEN/ CLOSED,
protection against dry running, overflow safety device, tank level control.

Refer to the Service Manual when connecting additional options, and make your selection!

Item no.: 53021

NEXT WATER GENERATION. ®
descon

Backwash valves for a manual backwashing

6-way backwash valve / manual 1 ½", incl. valve piping loose
Item no. 55031

6-way backwash valve / manual 2", incl. valve piping loose
Item no. 55032

6-way backwash valve / manual 3", threaded connection (all round)
Item no. 55035

BESGO automatic backwash valves

BESGO automatic backwash valves made of PVC-U with hydraulic drive for water or air. DN 40 - 125 with adhesive nipple (can be glued outside), inner parts in stainless steel (V4A 1.4571), gasket Viton / PTFE - ozone-resistant, incl. solenoid valve with emergency manual override. Backwash valve incl. 3/2 230 Volt solenoid valve - assembled,
pressure loss: per 20 m³/h = 3 m WC pressure loss

BESGO automatic backwash valve, 5-way valve
DN 40/50 mm, spacing 125 mm.
Among other things, for descon® home BASIC 500/610 mm and PREMIUM 610 mm.
Item no.: 55050

BESGO automatic backwash valve, 5-way valve
DN 50/63 mm, spacing 190 mm. Among other things, for descon® home PREMIUM 765/910 mm and EXCLUSIVE 610/765 and 920 mm.
Item no.: 55051

BESGO automatic backwash valve, 5-way valve
DN 80/90 mm, spacing 300 mm.
Item no.: 55052

BESGO automatic backwash valve, 5-way valve
DN 100/110 mm, spacing 360 mm.
Item no.: 55053

BESGO automatic backwash valve, 5-way valve
DN 125/140 mm, spacing 450 mm.
Item no.: 55054

BESGO automatic multi-way valves

BESGO 3-way valves in PVC-U for alternative uses and rinsing

BESGO 3-way valve
DN 40 / 50 mm

Item no.: 55065

BESGO 3-way valve
DN 50 / 63 mm

Item no.: 55066

BESGO 3-way valve
DN 80 / 90 m

Item no.: 55067

BESGO 3-way valve
DN 100 / 110 mm

Item no.: 55068

BESGO 3-way valve
DN 125 / 140 mm

Version for water pressure **Item no.: 55069**
Version for air pressure **Item no.: 55069**

BESGO 4-way solar valve

PVC for a noiseless operation

BESGO 4-way valve
DN 40 / 50 mm

Item no.: 55060

BESGO 2-way valve

Applications: - For an automatic ventilation of filters
- For an automatic channel switching (channel cleaning)

BESGO 2-way valve, DN 40 / 50 mm

Item no.: 55075

BESGO 2-way valve, DN 50 / 63 mm

Item no.: 55076

BESGO 2-way valve, DN 65 / 75 mm

Item no.: 55077

NEXT WATER GENERATION. ®
descon

Immersion pipe for command controls
made of stainless steel, d = 6 mm, 1/2", PG 9

Item no.: 55115

Temperature sensor "Water" PT 1000
Cable 2 m, black, for all command devices

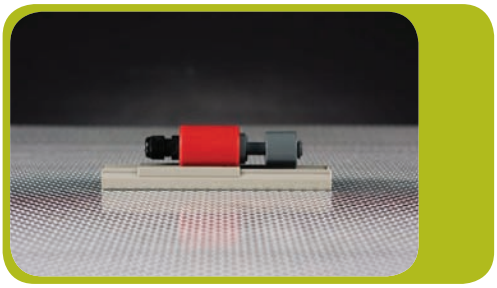
Item no.: 55111

Temperature sensor "SOLAR" PT 1000
Cable 10 m, black, for command plus

Item no.: 55112

Temperature sensor "SOLAR" PT 1000
Cable 20 m, black, for command plus

Item no.: 55113



niveau compact, level sensor with 5 m cable
(for skimmer control, solenoid valve by customer

Item no.: 55108

Ultrasonic sensor with 3 m cable
for command plus and backwash plus

Item no.: 55110

Three-phase contactor and motor protection
in wall mounting case (CIK make), 1.6 - 2.4 A

Item no.: 53050

Three-phase contactor and motor protection
in wall mounting case (CIK make), 2.4 - 4.0 A

Item no.: 53051

Three-phase contactor and motor protection
in wall mounting case (CIK make), 4.0 - 6.0 A

Item no.: 53052

Three-phase contactor and motor protection
in wall mounting case (CIK make), 6.0 - 9.0 A

Item no.: 53053

NEXT WATER GENERATION. ®
descon

BESGO | ACCESSORIES

BESGO installation kit 3/8"
for control of the water pressure, consisting of:
pressure gauge 0 - 10 bar, non-return valve, fine filter, cut-off valve

Item no.: 55080

Connection kit 1 to compressor 3/4" female thread
for 1 BESGO valve consisting of:
1 ball valve, 2 pipe fittings, 10 m PE hose

Item no.: 55081

Connection kit 2 to compressor 3/4" female thread
for 2 BESGO valves consisting of: 1 ball valve, 3 pipe fittings,
1 T-fitting, 10 m PE hose 6/4mm

Item no.: 55082

Connection kit 3 to compressor 3/4" female thread
for 3 BESGO valves consisting of: 1 ball valve, 4 pipe fittings,
2 T-fittings, 10 m PE hose 6/4mm

Item no.: 55083

Einhell compressor
oil-free, 1.1 kW, 230V, tank capacity 24 l,
max. operating pressure 8 bar, 22kg, sound level 92 dB,
with pressure reducer, 2 pressure gauges and water drain valve

Item no.: 55084

Sil-Air compressor, model 30D 230V
4l tank capacity, max. operating pressure 8 bar, 22kg
for a low-noise operation 40dB

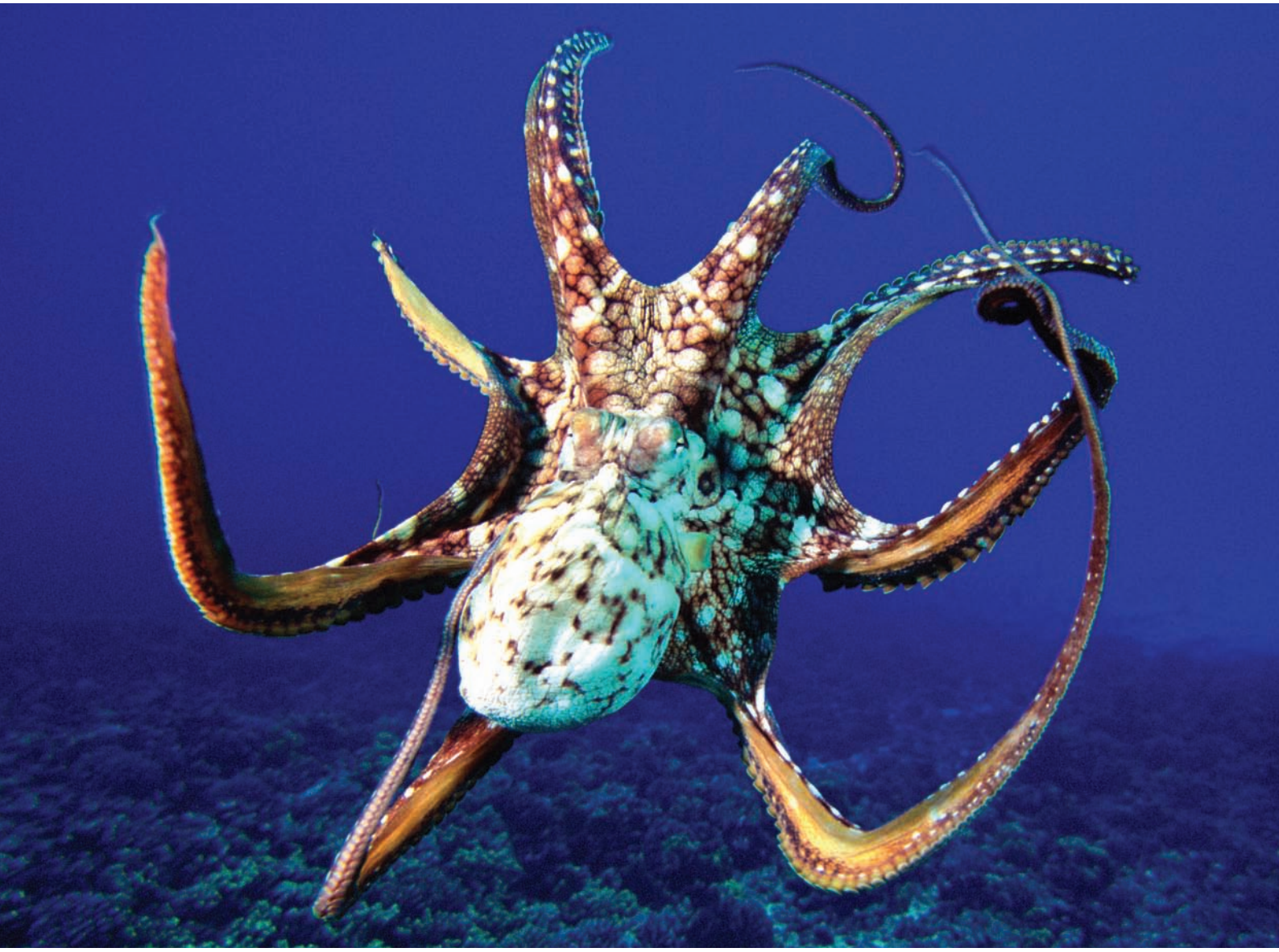
Item no.: 55085

Sil-Air compressor, model 50D 230V
6l tank capacity, max. operating pressure 8 bar, 23kg
for a low-noise operation 40dB

Item no.: 55086

NEXT WATER GENERATION. ®
descon

WATERCARE COMPLETE SYSTEMS FOR AN EFFICIENT WATER TREATMENT.



NEXT WATER GENERATION. ®

descon

descon® watercare

The demands made on treatment systems for swimming pool water are high. Specific properties of the fill water; the temperature of this water and the pool load can result in a variety of adverse reactions up to massive problems. Especially observing the proper pH value and the disinfectant content are of great importance to ensure an hygienically safe and impeccable pool water and an undisturbed bathing pleasure.

Definitely the best solution:

descon® watercare complete - compact systems for private swimming pools and Jacuzzis. The systems are characterized by perfectly matched components and a high quality. The entire system is pre-mounted as compact unit in a space-saving design, and ready for operation in no time.

For swimming pools up to 115 m³.

NEXT WATER GENERATION. ®

descon

SYSTEM|COMPLETE

NEXT WATER GENERATION.®

descon

SYSTEM|COMPLETE

Measuring, control and metering technology descon® trol S

Filter control descon® command plus / bw / eco

Automatic backwash descon® backwash

Additional disinfection descon® ultraV

Flocculant dosing descon® dos vision

Filter pump

descon® watercare complete

A simply brilliant water quality.

descon® watercare complete are made of high-quality, proven components from the **descon®** program and are put together individually according to your requirements. The cornerstone and basis for an excellent water treatment is a **home exclusive** high-bed filter and a **descon® trol S** measuring, control and metering system.

The modular plug-and-play system

- **Measuring, control and metering technology descon® trol S**
- **Filter control descon® command plus**
- **Automatic backwash descon® backwash**
- **Additional UV disinfection descon® ultraV**
- **Flocculant dosing descon® dos vision**
- **Filter pump**
- **Filter home exclusive**

The **descon® watercare complete** systems are built to your individual needs.

NEXT WATER GENERATION. ®
descon

SYSTEM | **ECO**

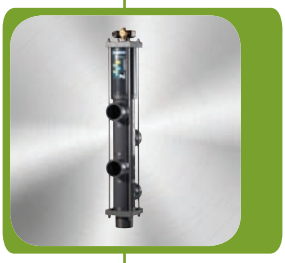
NEXT WATER GENERATION. ®

descon

SYSTEM |ECO

Measuring, control and metering technology descon® trol S

Filter control descon® command plus / bw / eco



Automatic backwash BESGO

Flocculant dosing descon® dos vision

Filter pump

descon® watercare eco

A simply brilliant water quality.

descon® watercare eco are made of high-quality, proven components from the **descon®** program, and are put together individually according to your requirements. The cornerstone and basis for an excellent water treatment is a **home premium** high-bed filter and a **descon® trol S** measuring, control and metering system.

The modular plug-and-play system

- **Measuring, control and metering technology descon® trol S**
- **Filter control descon® command plus**
- **BESGO automatic backwash valves**
- **Flocculant dosing descon®dos vision**
- **Filter pump**
- **Filter home premium**

NEXT WATER GENERATION. ®

descon

FILTER TECHNOLOGY AND ACCESSORIES FOR PUBLIC POOLS.

NEXT WATER GENERATION. ®

descon

descon® Filter norm

The **descon®** range includes high-quality filter tanks made of fiber-glass reinforced polyester GRP for commercial and public sectors. **descon® norm** Filter tanks are available in sizes ranging from 610 - 2000 mm in diameter. Additional components as add-on for the filter systems complete the program. We will be happy to prepare project-based offers for you. Please contact our project department.

Filter components:

FILTER | **NORM**

NEXT WATER GENERATION. ®

descon

Filter tank descon® norm
Filter tank made of fiberglass reinforced polyester (GRP) with nozzle floor, cylinder for a filling height 1200 mm, positive operating pressure 2.00 bar.

Filter tank, works in descending flow (offstream process)

descon® professional-line norm, made exclusively of corrosion-free, high-quality polyester resins (lisophthalic acid resins), standing, closed cylindrical design, equivalent to DIN 19605/19643, completely homogeneous overall structure made entirely of fiberglass, rotproof. Base ring made of glass fiber reinforced polyester, adapted to the tank size.

Colour: descon® green

Cylindrical part, bottom of tanks, transitions, connections and loose flanges manufactured in a particularly robust hand lamination process. Interior film made of food safe special resin highly resistant to abrasion, resistant to chemicals of all process combinations according to DIN 19643, with the exception of OZONE.

Built-in components:
Hard laminated GRP nozzle floor
secured by centrally fixed pipe support in PVC.

Nozzle plate assembly
Min. 60 pcs/m² installed filter nozzles, air-cushion nozzles in case of purge air connection, material PP, Ø 58 mm,
height 38 mm, with 30 fine slots, a = 0.25 mm = 1.50 cm²,
shaft: l = 100 mm, Ø 16 mm = 2.00 cm².
Attachment from top with expansion bolts.

Moulded part in GRP/PVC. Fitting as sludge hopper with PVC connection of inner raw water piping. Size and diameter according to the respective tank size.

Quality assurance
Technical design according to DIN 19605.
Calculated verification, statics of the tank to AD leaflet 2000 N 1, pressure tanks.
Made of textile glass-reinforced thermosetting plastics (GRP).

- According to DIN V 2505, calculation of flanged connections.
- According to AD leaflet 2000 B 4, dished covers
- According to AD leaflet 2000 B, screws
- Pressure Equipment Directive 97/23 EC

Additional equipment
Design of operating pressure:
2.0 bar with a testing of the overpressure of 2.6 bar

Temperature resistance up to 40°C

Inspection window (sight glass)
Lookthrough size 55 x 345 mm or 55 x 245 mm
Moulding part in GRP, loose flange inserted into the cylinder.
Allows a particularly good observation of the filter bed expansion during the backwash process in accordance with DIN 19643, 19605, including all necessary accessories.
Additional charge for
AQUALIGHT tank lighting.

FILTER | NORM

descon® norm

descon® norm, filter tanks in high-quality, fibre-glass reinforced polyester (GRP) with protective sealing inside, made with an approved manual lamination process, with built-in nozzle floor, inside piping, filling port and lateral maintenance port, incl. protective caps made of plastic for screw heads. For technical details and application recommendations, see the following table, or refer to the general information about descon norm filter tanks. One inspection window (sight glass), lookthrough size 55 x 245 mm is included in the standard delivery/price. Additional inspection windows, also with greater dimensions, may be installed at an additional charge. Filter tanks for higher operating pressures, price on request.

For operation pressure:	**max. 2.0 bar**
Test pressure:	**2.6 bar**
Tank colour:	**descon® green**
Filter base / cover / protective caps:	**black**
Operating temperature:	**max. 40°C**

Select the tank(s) according to the required volume flow. Please do not hesitate to request individual advice.

Tank d = mm	Tank height mm	Filter area m²	Volume flow m³/h at 30 m/h	Volume flow m³/h at 50 m/h	Filling port DN	Maintenance port DN	Revision port DN	Item no.
610	2100	0.29	8.4	14	210	210	x	52000
765	2350	0.46	13.8	23	210	210	x	52001
920	2325	0.65	19.5	32.5	210	210	x	52002
1080	2450	0.92	27.6	46	430	430	x	52003
1250	2530	1.23	36.9	61.5	430	430	x	52004
1450	2710	1.66	46.2	77	500	500	150	52005
1800	2850	2.55	76.2	127	500	500	150	52006
2000*	2200	3.14	94.2	157	500	430	50	52007

*** This model consists of two parts.**

Accessories for filter tanks 'norm'

Ventilation fitting for 'norm' series

Ventilation valve type A for filter tanks NORM made of stainless steel V4A 3/4“ female thread and 1/2“ male thread, with large aerator d 32, manual ventilation d 20, for connection to test panel, with PVC cover and protection plate. For 'norm' 610 – 920 mm

Item no. 55027

Ventilation valve type B for filter tanks NORM made of stainless steel V4A 3/4“ female thread and 1/2“ male thread, with large aerator d 32, manual ventilation d 20, for connection to test panel, with PVC cover, protection plate and PVC screwing.
For 'norm' 1080 – 2000 mm

Item no. 55028

NEXT WATER GENERATION. ®
descon

Backwash valves for 'norm' series

6-way backwash valve / manual 3"

Threaded connection (all round), without piping material, suitable for filter 'norm' 610/765/920/1080 and 1250 mm

Item no. 55035

BESGO automatic backwash valves

BESGO automatic backwash valves made of PVC-U with hydraulic drive for water or air. With adhesive nipple (can be glued outside), inner parts made of stainless steel (V4A 1.4571), gasket Viton / PTFE - ozone-resistant, incl. solenoid valve with emergency manual override. Backwash valve incl. 3/2 230 Volt solenoid valve - assembled.
Pressure loss: per 20 m³/h = 3m WC pressure loss.

BESGO automatic backwash valve, 5-way valve

DN 80/90 mm, center-to-center distance 300 mm, for 'norm' 610 and 765 mm

Item no. 55052

DN 100/110 mm, center-to-center distance 360 mm, for 'norm' 920 mm

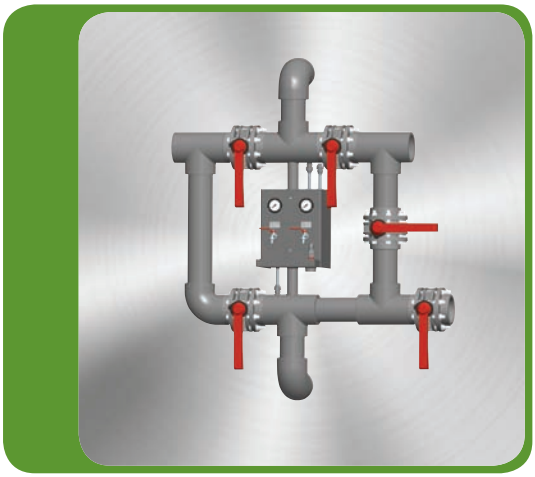
Item no. 55053

DN 125/140 mm, center-to-center distance 450 mm, for 'norm' 1080 and 1250 mm

Item no. 55054

Front control unit for 'norm' series

Front control unit (control panel) with 5 butterfly valves with hand lever, including flanges, flange sleeves, screwing material, elbows, T-pieces and pipe cut to length, not glued.
For filter positions:
FILTRATION / BACKWASH / RINSE / DRAIN / CLOSED



Version	DN	Diameter	Item no.:
norm 920 mm	**100/80**	**110/90 mm**	**55090**
norm 1080 mm	**125/110**	**140/110 mm**	**55091**
norm 1250 mm	**125/125**	**140/140 mm**	**55092**
norm 1450 mm	**150/125**	**160/140 mm**	**55093**
norm 1800 mm	**200/150**	**225/160 mm**	**55094**
norm 2000 mm	**200/200**	**225/225 mm**	**55095**

Test panel for series norm

Test panel made of PVC with testing / sampling valves 1/2 „flamed“ for raw and filtered water, including 2 manometers, measuring range 0,5 - 4 bar, including shelf for samples, including piping components for connection to the filter tank.

Item no. 55025

Test panel differential pressure manometer, PE blue, with a differential pressure gauge, diameter 160 mm with double display, fitted into a sheet of PE blue, direct display of the filter resistance, with drain pan and two sampling taps, flamed, including connection-material galvanized, 3/4“, for on-site attachment, measuring range 0 – 2,5 bar.

Item no. 55026

NEXT WATER GENERATION. ®
descon

FILTER | **NORM**

Filter pumps for 'norm' series

The filter pump must be selected according to the particular project.
Specifications and pump performance curves are available.

Please contact our project department.

Orifice flow meter for 'norm' series

Bypass flow meter for installation between flanges
for measurement and display of the volume flow in filter systems.
Mode of operation: orifice flow meter with standard cover

Bypass flow meter DN 50

For installation between flanges/measuring range 5-25 m^3/h

Item no. 55160

Bypass flow meter DN 80

For installation between flanges/measuring range 13-65 m^3/h

Item no. 55161

Bypass flow meter DN 100

For installation between flanges/measuring range 16-80 m^3/h

Item no. 55162

Bypass flow meter DN 125

For installation between flanges/measuring range 24-120 m^3/h

Item no. 55163

Bypass flow meter DN 150

For installation between flanges/measuring range 32-160 m^3/h

Item no. 55164

Bypass flow meter DN 200

For installation between flanges/measuring range 80-400 m^3/h

Item no. 55165

NEXT WATER GENERATION. ®

descon

Inspection window / sight glass for 'norm' series

Inspection window, flush inside, for 'norm' filter tank. Moulded part in GRP, designed as a loose flange, factory fitted into the cylinder.
Allows a particularly good observation of the filter bed expansion during the backwash process in accordance with DIN 19643, 19605, including sealing material, nuts and washers.

Inspection window, lookthrough size: 245 x 55 mm

Item no.: 55009

Inspection window, lookthrough size: 345 x 55 mm

Item no.: 55010

1 inspection window 245 x 55 mm is included in the delivery of the 'norm' filter tank.

Filling table filter 'norm'

Filter model	Diameter mm	MF = Multi-layer filter	Quartz sand 0.40-0.80 mm Item no.: 55100	Quartz sand 0.75-1.25 mm Item no.: 55101	Quartz sand 1.00-2.00 mm Item no.: 55102	Hydro-anthracite H 1.40-2.50 mm Item no.: 55104	HYDRO SORB100 0.6-2.36 mm Item no.: 55105
norm	610	MF	150 kg	75 kg	50 kg	105 kg	75 kg
norm	765	MF	250 kg	100 kg	75 kg	210 kg	150 kg
norm	920	MF	350 kg	150 kg	100 kg	280 kg	200 kg
norm	1080	MF	500 kg	175 kg	150 kg	385 kg	275 kg
norm	1250	MF	650 kg	275 kg	175 kg	525 kg	375 kg
norm	1450	MF	800 kg	350 kg	225 kg	630 kg	450 kg
norm	1800	MF	1300 kg	600 kg	350 kg	1050 kg	750 kg
norm	2000	MF	1625 kg	675 kg	450 kg	1152 kg	825 kg

*** We recommend the product HYDRO SORB 100 in case of high loads and for a reduction of combined chlorine.**

descon®

NEXT WATER GENERATION. ®
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OZONE AND **UV SYSTEMS** FOR AN **OPTIMUM** WATER **DISINFECTION.**

NEXT WATER GENERATION. ®

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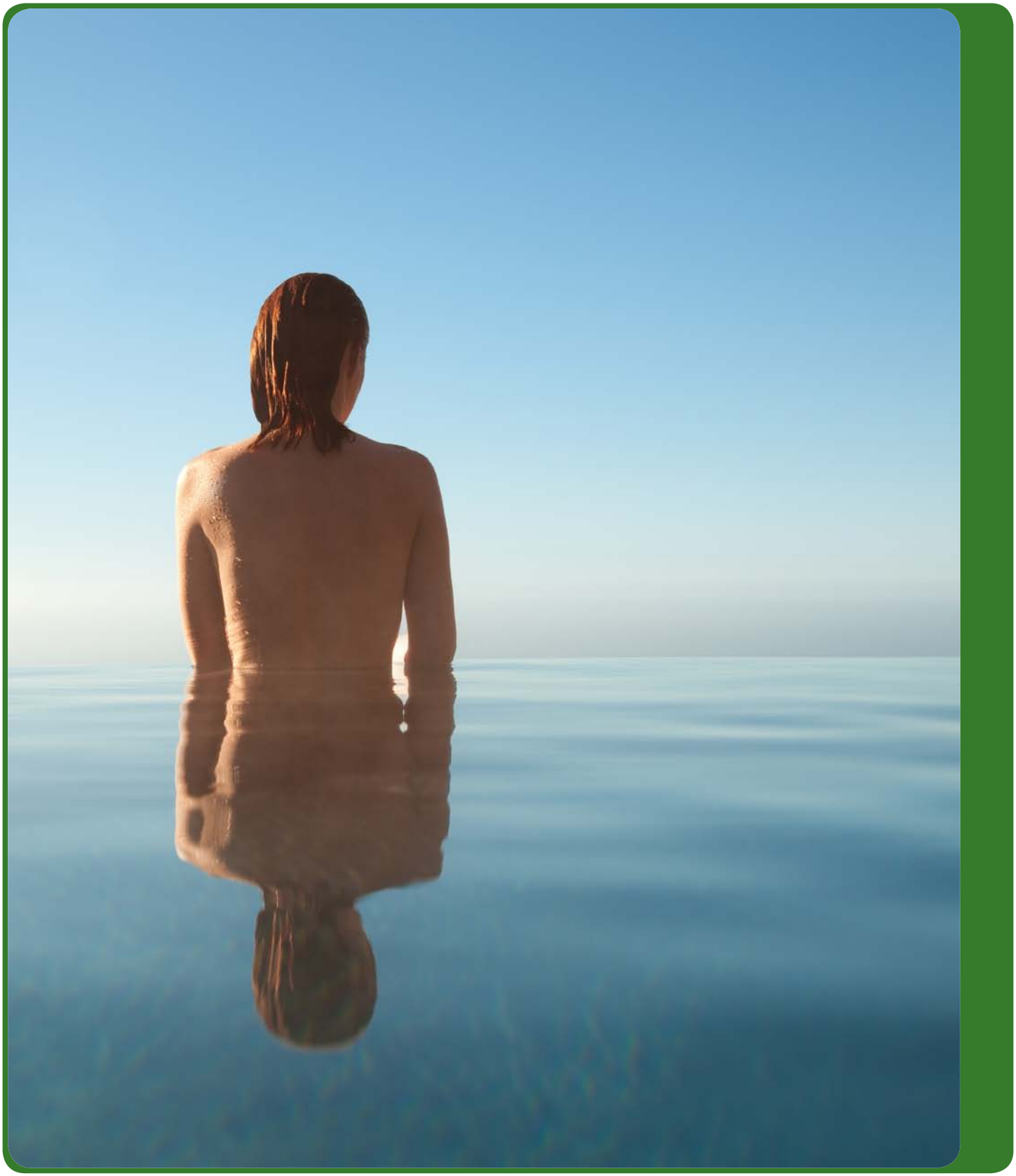
descon® UV + Ozone

Optimization of your water-treatment with descon UV- and ozone-systems

descon®ultraV or **descon®ZON** - your decision for an intelligent, high-end-quality and well-engineered product.
These technologies improves your water-quality, e. g. reduction of combined chlorine and killing/deactivation of microbes, micro-organism as well as reduction of disinfectant.

SYSTEM | **UV**



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descon® ultra V

descon®ultraV

The **descon®ultraV disinfection systems** are made of stainless steel and are installed in a slip-stream in the clean water pipe and after the filter. The system is characterized, among other things, by a maximum yield of the UV radiation by formation of turbulence, taking advantage of the entire length of the lamps and a selectively applied reflection in the reactor tube. The service life of the UV lamps is approx. 8000 hours of operation. A subsequent installation into existing system is possible without problems and with low space requirements.

What is UV light?
Ultraviolet (UV) light is part of the electromagnetic spectrum between visible light and x-rays.
The UV spectrum is divided into 4 areas. UVA / UVB / UVC and vacuum UV. In private swimming pools, low-pressure UV lamps with a wavelength of 254 nm are used.

descon®ultraV systems ensure a safe destruction or inactivation of microorganisms and bacteria in pool water. The use of chemicals can be noticeably reduced, and the UV light removes the typical pool smell. At the same time, UV light provides an excellent algae prophylaxis.

descon®ultraV 80-ND
Disinfection system with low-pressure UV lamp 80 W, for pool volumes 50-75 m³. With high-quality stainless steel burner chamber PN6 1.4404 (316l), for vertical and horizontal mounting, with sight glass for a visual inspection. Designed for approx. 8000 hours of operation. Connection 2 x 1 ½“ male. UV control system as separate unit for individual installation, 230 V, 50 Hz

Item no. 42010

descon®ultraV 120-ND
Disinfection system with low-pressure UV lamp 120 W, for pool volumes 75-75 m³. With high-quality stainless steel burner chamber PN6 1.4404 (316l), for vertical and horizontal mounting, with sight glass for a visual inspection. Designed for approx. 8000 hours of operation. Connection 2 x 1 ½“ male. UV control system as separate unit for individual installation, 230 V, 50 Hz

Item no. 42011

Replacement UV tube (low pressure emitters) 80 W, approx. 8000 hours of operation — **Item no. 45002**

Replacement UV tube (low pressure emitters) 120 W, approx. 8000 hours of operation — **Item no. 45003**

Special quartz glass for UltraV 80/120 - low pressure — **Item no. 45004**

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O_3 SYSTEM **OZONE**

NEXT WATER GENERATION. ®

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descon® ZON^{air}

descon®ZON 150^{air}

For pools with a volume of up to 150 m³

The **descon® OZONE systems** are suitable for indoor and outdoor pools, Jacuzzis and diving pools, and other applications in the water treatment sector. Technically mature, low-maintenance system for conditioning of up to 150m³/h water; connection of the system with minimum effort and expense. The water is extracted from a slip stream, after the filter, and is returned into the slip stream after treatment in the **descon® OZONE** system.

Functional principle
The **descon® OZONE** method is using the advantages of ozone without the technical complexity and expenses that are normally required. A slip stream of the treated water is extracted before or after dosing and is treated with ozone. The aspirated air is removed from the moisture in an air dryer, then it enters the ozone generator, where ozone (O_3) is generated by electric discharge from oxygen. Excess ozone is bounded to activated carbon after the gas phase. The water treated in this way is added to the main circulation flow. Possible residual quantities of dissolved ozone are reduced by dilution and/or reactive decomposition to such a degree that no free ozone is detectable in the pool water. Due to the continuous treatment of a slip-stream of the filtered water with ozone, the effects of water treatment go far beyond the results of a conditioning using chlorine only.

air drying
For the production of ozone, the operating air should be as dry as possible. Limitation is the dew point. The dew point is approximately - 40 ° C in optimally dried air, that means – under normal circumstances – that all dissolved water in the air (humidity) is intercepted. With increasing temperature, the amount of humidity increases. At temperatures of 30 ° C and moist environment the air is saturated with moisture, during cooling of the air, humidity condenses.

Please note the following, if you are working with humid ambient air during the ozone-generation:
- The nominal performance of the ozone system is reduced to about 50%
- In addition to ozone, also nitrogen-oxide and therefore undesirable nitrate is produced

descon®ZON 150^{air} - with integrated air drying ensures during the entire operating-time for optimum performance and significantly more efficiency than systems without air drying.

Design and specifications:
Reaction- and degassing-unit as well as water-trap consist of high quality stainless steel. The ozone generator, air dryer and the entire control-unit are mounted in a stainless steel case. All components incl. booster-pump are compact and pre-assembled on a mounting plate.
This ensures a fast installation on site.

Ozone output:	2 g/h
Main connection:	230V, 50/60 Hz
Flow:	approx. 2,5 m3/h
Power	approx. 980 W
Size (W x D x H):	55 x 49 x 135 cm
Weight:	approx. 55 kg

For pools with a volume up to 150 m³

Item no. 43000

NEXT WATER GENERATION. ®
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ELECTROLYSIS SYSTEMS FOR **A CONTEMPORARY** WATER TREATMENT.

NEXT WATER GENERATION. ®

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ELECTROLYSERS

descon® unides

On-site generation of a chlorine disinfectant solution

The required resources are NaCl (**descon® unides tabs**), water and electricity.

The use of electrolysis technology for the generation of chlorine is an important contribution to the prevention of hazards involved in the operation of swimming pools. The required disinfectant solution is generated locally and depending on demand, using salt (**descon® unides tabs** special salt tablets for electrolysis systems) and softened water. Hypochlorite solutions generated in this way are highly active and largely free of chlorate. Due to the composition, no special storage precautions are to be observed - slightly hazardous to waters (water hazard class 1). Many years of experience in the construction and handling of this technology ensure maximum benefits and operational reliability. The **descon® unides smart** electrolysis system works on the basis of applied technology (DBGM/patented) **"salt-neutral"**.

UNIDES | 30-60

System functions

The production takes place in a compact generating unit that includes all necessary components, such as a salt saturation tank, water softener, control and monitoring equipment. Plain system design to ensure an optimal performance at favourable costs. The chlorine storage tank is placed separately and can vary between 60 and 200 liters in capacity, depending on requirements and local conditions - not included in the delivery.
The maximum suction head to the storage container is 1000 mm for at-grade installations.

descon® unides 30 / 60

Output: approx. 30g (60g) of chlorine per hour
Specifications / resources:

NaCl tablets:	approx. 100 g/h (200 g/h)
Softened water:	approx. 8 l/h (16 l/h)
Power consumption:	approx. 200 VA (350 VA)

The chlorine concentration of the generated disinfection solution is approx. 3.5 g/l Due to the used process, the generated disinfection solution contains a percentage of the used salt. Taking the regeneration intervals of the softener into account, a daily production capacity of approx. 650g (1300g) is available. The chlorine demand per hour should not exceed 25g (50g) in continuous operation. The maximum circulation rates that can be treated are listed in the following table:

Indoor pool with gravel or multi-layer filter:	50 m³/h (100 m³/h)
Indoor pool with activated carbon filtration:	15 m³/h (30 m³/h)
Outdoor pool:	15 m³/h (30 m³/h)
Drinking water disinfection:	50 m³/h (100 m³/h)

descon® unides 30
Item no. 41000

descon® unides 60
Item no. 41001

Storage tank for sodium hypochlorite solution

for UNIDES 30/60 electrolysis systems, consisting of:

Cylindrical container made of polyethylene, UV stabilized, with screw cap, liter scale and emptying port ¾". Level control with min. and max. level installed in the tank.

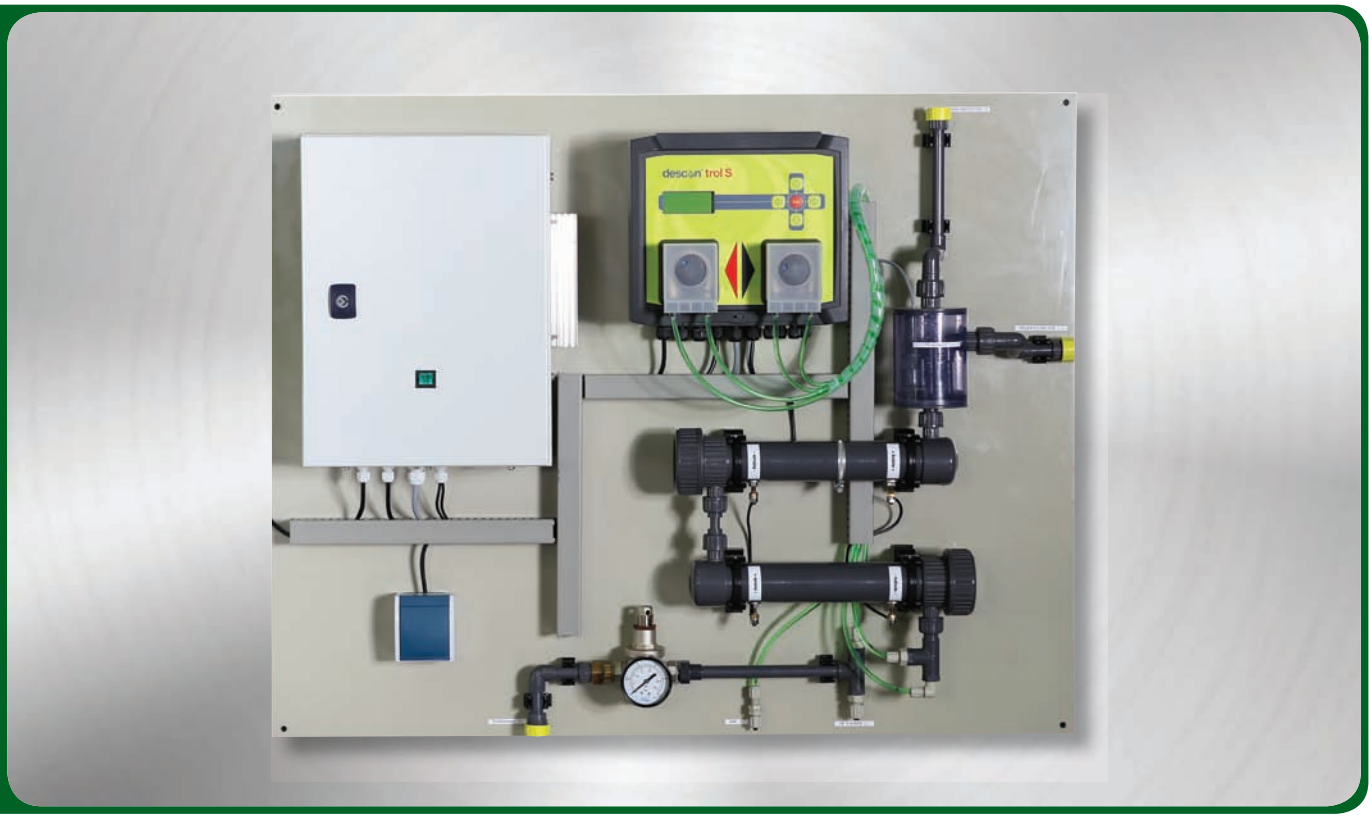
Storage tank 35 l
Item no. 45009

Storage tank 100 l
Item no. 45010

Level control for storage tank 35 l
Item no. 45015S

Level control for storage tank 100 l
Item no. 45015

UNIDES | 30-200 ECO



descon® unides 30 / 200

Structure and functions of the system
This series has the same functionality to the series **unides 30** and **60**. The version “ECO” is just without the housing.
All components for the electrolysis process are mounted clear and easy on a wall mounting panel. Other components (separately) cabinet - brine tank complete with float valve, water-softener time-controlled with switch for regeneration signal, product tank with level control (min. / max. level). Plain system design to ensure an optimal performance at favourable cost.
The chlorine concentration of the generated disinfection solution is about 3.5 g/l Due to the used process, the generated disinfection solution contains a percentage of the used salt.

descon® UNIDES 30 ECO, on wall-panel,
production-capacity: approx. 30 g chlorine per hour **Item-no. 41000E**

descon® UNIDES 60 ECO, on wall-panel,
production-capacity: approx. 60 g chlorine per hour **Item-no. 41001E**

Storage-tank and level-control to be ordered separately, see unides 30/60

descon® UNIDES 120, on wall-panel,
production-capacity: approx. 120 g chlorine per hour
incl. storage-tank and level-control **Item-no. 41002**

descon® UNIDES 200, on wall-panel,
production-capacity: approx. 200 g chlorine per hour
incl. storage-tank and level-control **Item-no. 41003**

UNIDES | **SMART**

NEXT WATER GENERATION. ®
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UNIDES | SMART

We offer an alternative to chlorine gas, chlorine granules or divided-cell electrolysis

descon® unides smart 250-2000

Chlorine generation on site using salt
Active chlorine is generated in an inexpensive and safe way using tablets salt, electricity and softened water.

Robust technology without membrane
A sodium hypochlorite solution is generated from a NaCl solution in undivided cells. Load dependent addition to the pool water immediately after the generation using metering systems.

No increase of the chloride content in the pool water
Pool water is used to prepare the operation brine, and salt is removed from this water in a special process. The protected plant technology (DBGM/patented) takes chlorides from the pool water to the same extent as they are added via the chlorine solution. By means of this technology, the **descon® unides smart electrolysis system** can be used with all types of material used in pools without risk of corrosion.

No stock-related formation of chlorate in the dosing solution
descon® unides smart electrolysis systems are designed so that only a minimum stock of the disinfectant solution is kept. Due to the fact that there is virtually no storage time and the low temperature of the product stock, a formation of chlorate is largely avoided. In addition, the potential hazards of a storage of large amounts of disinfectant solution are also eliminated.

Long electrode life span
Due to the process, the service life of electrodes used in electrolysis systems with undivided production cells (tubular cells) is extremely long, provided that certain requirements are met. In **descon® unides smart systems,** these parameters are considered as part of the control technology. In contrast to membrane cells, the electrodes can be easily regenerated in case of calcification, thereby avoiding potentially high costs involved in a renewal of the cells.

Chlorine generation at favourable prices
About 5 kWh of electricity and 3.2 kg of salt are needed for the generation of 1 kg of active chlorine.
Due to the use of pool water as process water and the associated permanent salt withdrawal - including nitrates - it is possible to achieve considerable savings as regards water and heating.

Maintenance requirements
As applies to all technical equipment used in pools, a maintenance is to be carried out once a year, and is essentially limited to functional tests and cleaning.

NEXT WATER GENERATION. ®
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UNIDES | **SMART**

We offer an alternative to chlorine gas, chlorine granules or divided-cell electrolysis

descon® unides smart 2000

Die **descon® unides smart 250** und **500** g / h (daily output 6 and 12 kg chlorine) are used as a compact unit in a closed housing. The system sizes **1000**, **1500** and **2000** g / h (daily capacity 24 - 48 kg chlorine) are modular and consists of 2 aligned assembly-modules.

Module 1: Electrolysis - module including cabinet and processes-control..

Module 2:. Desalination - module including booster-pump and internal piping.

NEXT WATER GENERATION. ®
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UNIDES | **SMART**

H_2O NaCl

Technical Data:

Item No.		Power Chlorine / h	Daily output kg/24 h
41525	unides smart 250	250 g/h	6 kg
41500	unides smart 500	500 g/h	12 kg
41501	unides smart 1000	1000 g/h	24 kg
41502	unides smart 1500	1500 g/h	36 kg
41503	unides smart 2000	2000 g/h	48 kg

Chlorine content of the solution:	0.5%
pH of the solution:	> 11 pH
Salt supply:	125 - 425 kg depending on the type of system
Max. temperature increase of product:	10 k

Consumption per produced kg of active chlorine:	
Power consumption:	about 5.0 kWh
Water consumption production:	200 liters
NaCl consumption:	about 3.2 kg
Consumption Antiscaling:	130 ml

NEXT WATER GENERATION. ®

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DESCON**DOME**

NEXT WATER GENERATION. ®

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DESCON**DOME**

The alternative chlorine supply for public swimming pools

descon® dome is designed as chlorine-supply-system instead of chlorine-gas or membrane electrolysis-systems. No more expensive maintenance and repairs and exchange of membrane-cells.

This system produces an approx 4% active chlorine solution out of calcium hypochlorite, with a capacity of up to 4000 g per hour.

The chlorine solution is generated depending on demand without interruption in about 25 l batches. Advantage of using calcium hypochlorite is to stabilize the acid capacity and unproblematic storage of the chlorine. Calcification and siltation, which usually occur with the use of calcium hypochlorite, are excluded due to the specialized installation technology.

The disposal of the resulting waste water is an environmentally friendly manner prior to the neutralization of the residual chlorine contained therein. The entire production of the chlorine- solution is carried out in a closed housing equipped with active carbon-filter-system for the exhaust air and a drip tray with leakage monitoring.

descon® dome feeding take place with chlorine-granules on 45kg containers, without efforts with a motorized lift.
The user does not come into contact with the chlorine. With an average pool water treatment of **500 m³ / h turnover-rate**, the content of one container is sufficient for about 5 operating-days.

descon® dome is equipped with a touch screen and ready for communication with central control system - equipment.
Safety first! The entire operation is controlled with high-quality sensor-technology and all safety-related processes are monitored twice.

Functioning of the system:
The chlorine granules are dissolved with process water in a reactor and led into a sedimentation-container. The solution is adjusted to a pH of about 8 and extracted by dosing-pumps. During the withdrawal a second sedimentation-container is filled in the same process in order to generate always a sufficient available chlorine stock.
The generation of the chlorine solution takes place without interruption and is redundant. The empty unit is cleaned in a special procedure, wherein the waste water from the cleaning process is neutralized and discharged de-chlorinated. The purified device is then in „Standby mode“. Once a day, outside the operating times, the entire conveying and metering section is cleaned automatically.

Technical data:

Capacity:	**up to 4 kg of chlorine / h**
Chlorine content of the solution:	**about 4%**
pH of the solution:	**<8 pH**
Calcium hypochlorite granules stock:	**90 kg (at least 70%.)**
Electrical connection:	**230 V / 16 A**
Power consumption:	**100 W**
Ambient temperature:	**max. 40 ° C**

Item No .: 44000

NEXT WATER GENERATION. ®
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UNIDES | TABS

descon® unides tabs
special tablets salt (high-purity)
for electrolysis systems

Hardness components and heavy metals in the operating salt can cause deposits on electrodes used in electrolysis systems, which can subsequently lead to a reduced system performance or even to a failure of electrodes.

descon® unides tabs are made of high-purity salt (common salt/ NaCl) and contain no unwanted components such as hardeners or heavy metals.

Extract of analysis:

Sodium chloride (NaCl)	min. 99.9 %
Calcium	max. 20 mg/ kg
Heavy metals (total)	max. 2 mg/ kg

Item no. 21070

NEXT WATER GENERATION. ®

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MADE IN **GERMANY.**

largomedia.de

NEXT WATER GENERATION. ®

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